

Fig. 1A

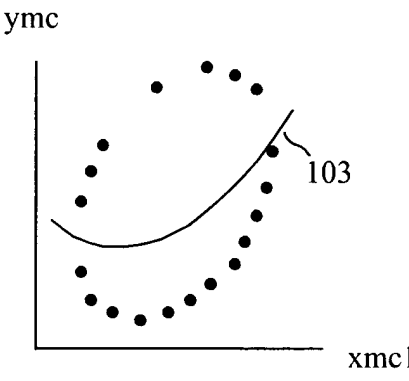


Fig. 1B

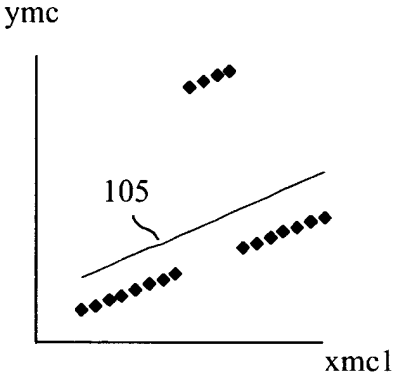


Fig. 2

		Explanatory Variate	
		Continuous	Discrete
Response Variate	Continuous	Regression	Analysis of Variance
	Discrete	Logit	Contingency Table Analysis

Fig. 3

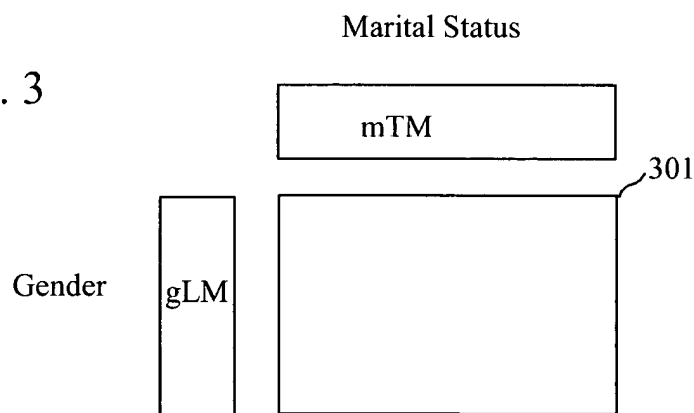


Fig.4 (Prior-art)

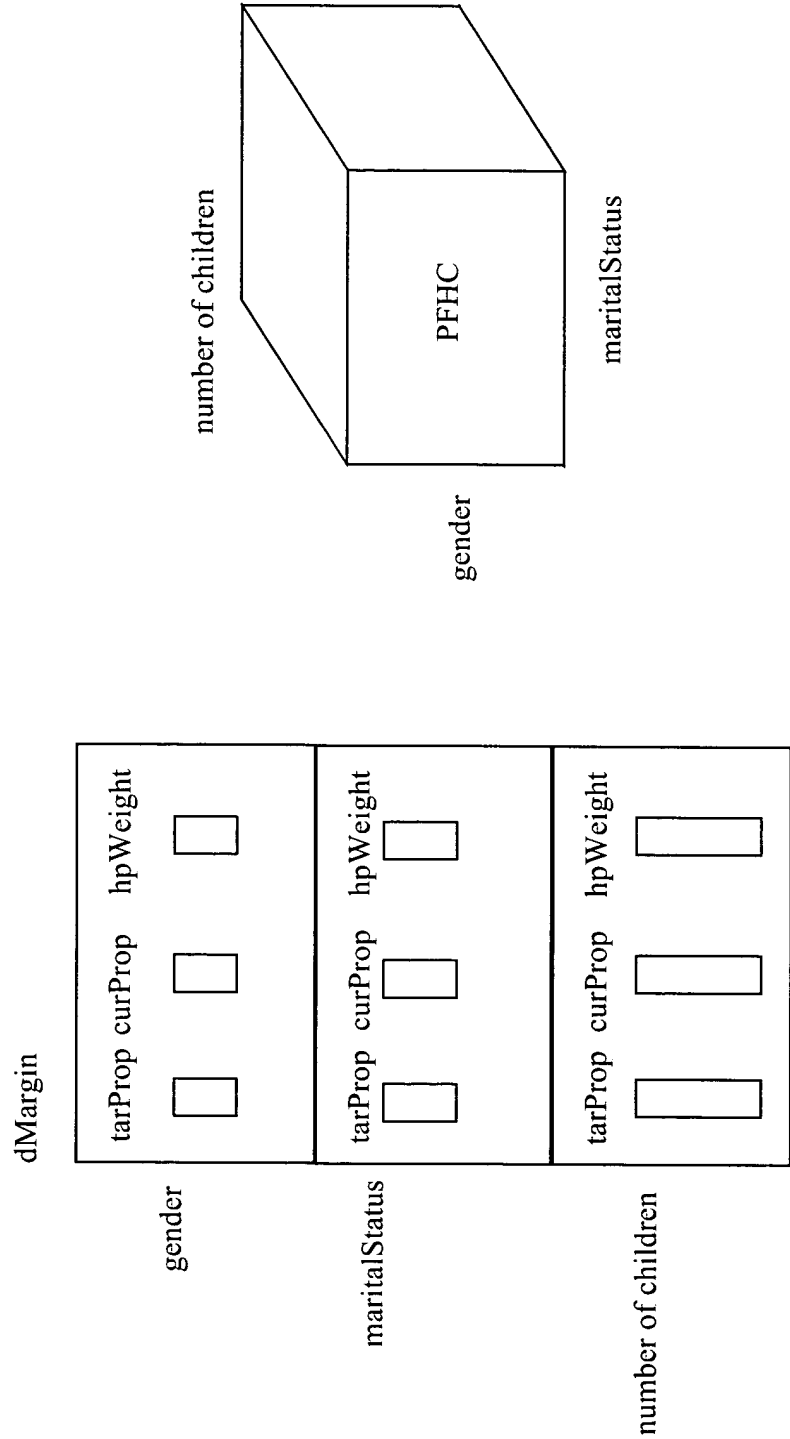


Fig. 5

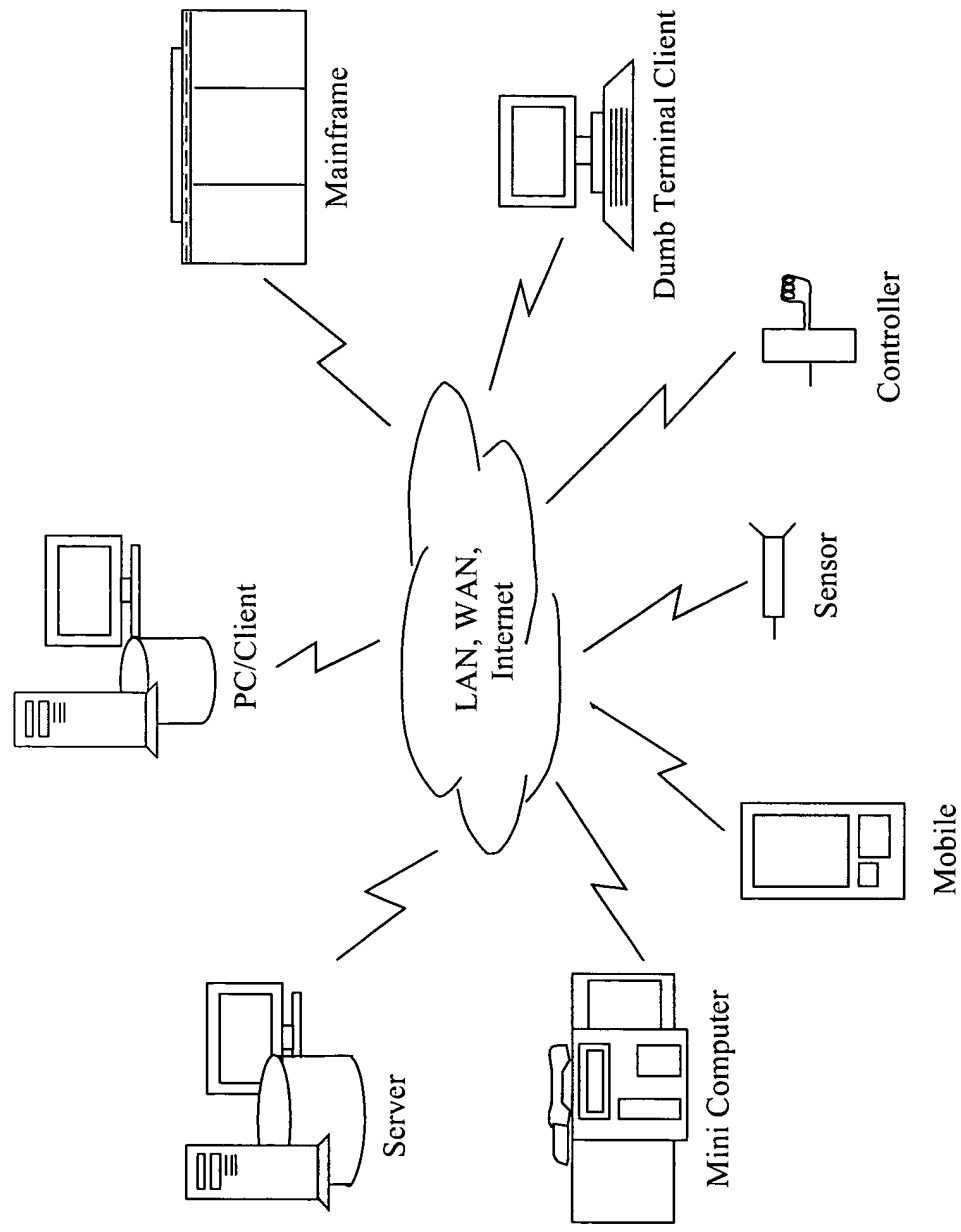
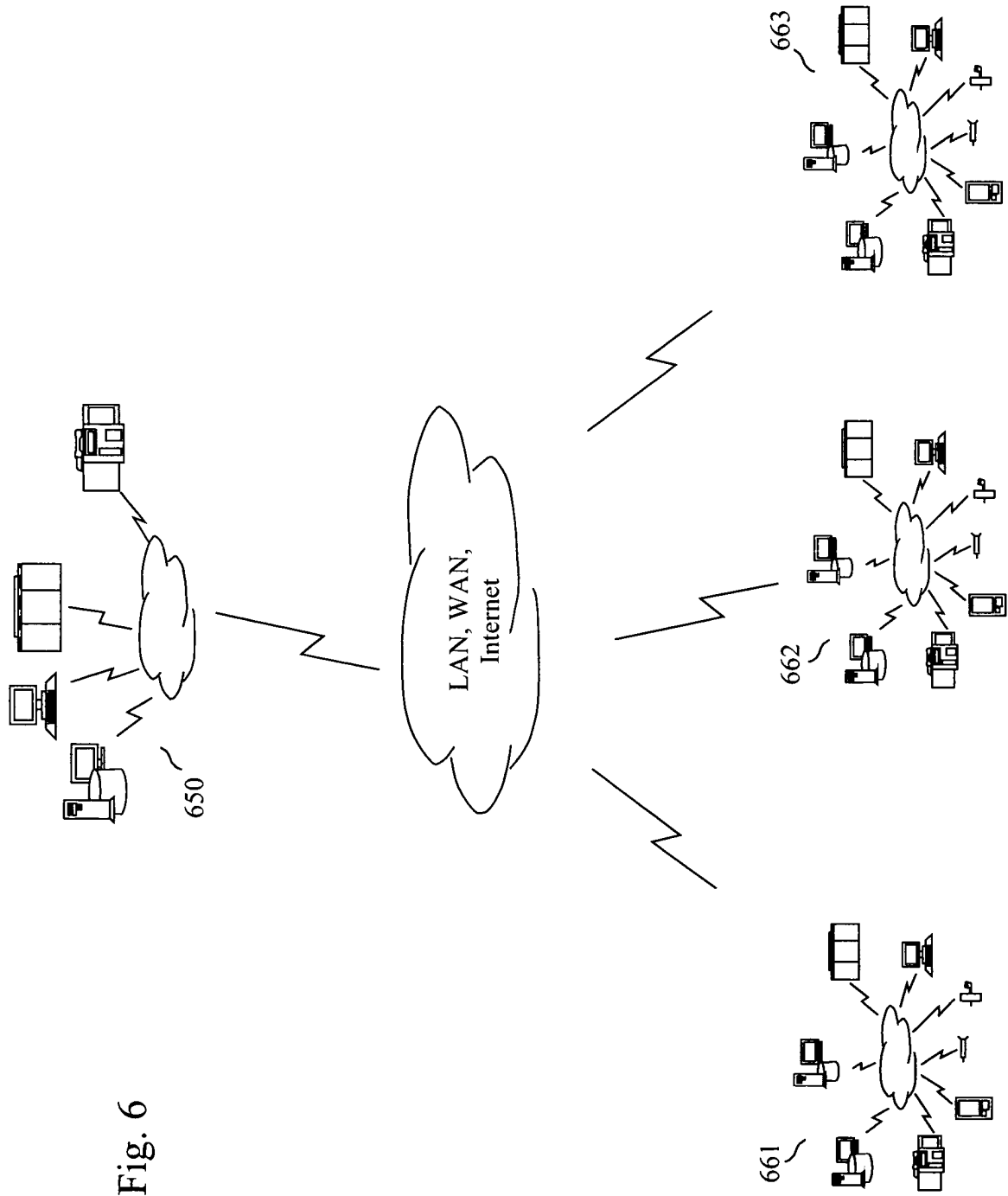


Fig. 6



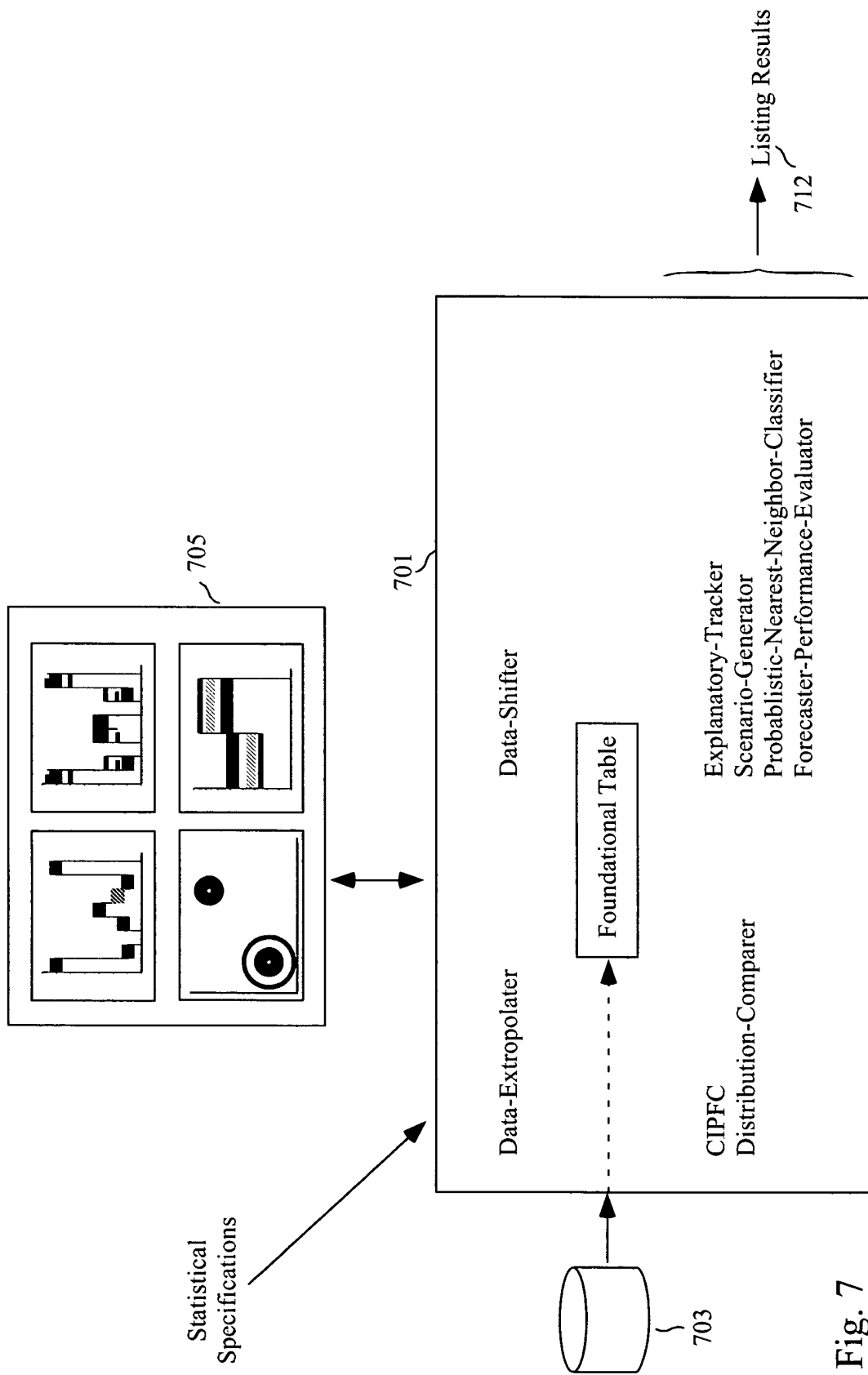


Fig. 7

Fig. 8

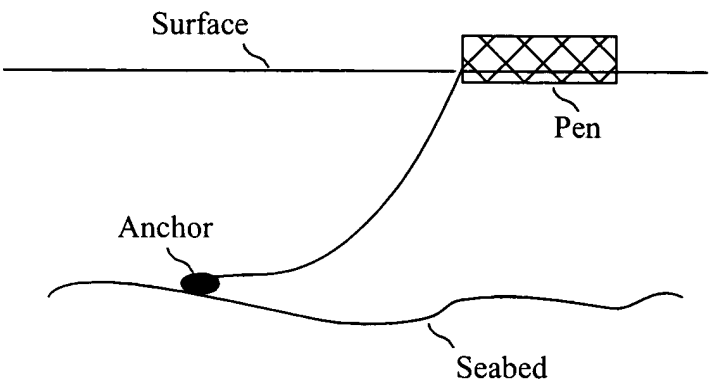


Fig. 9

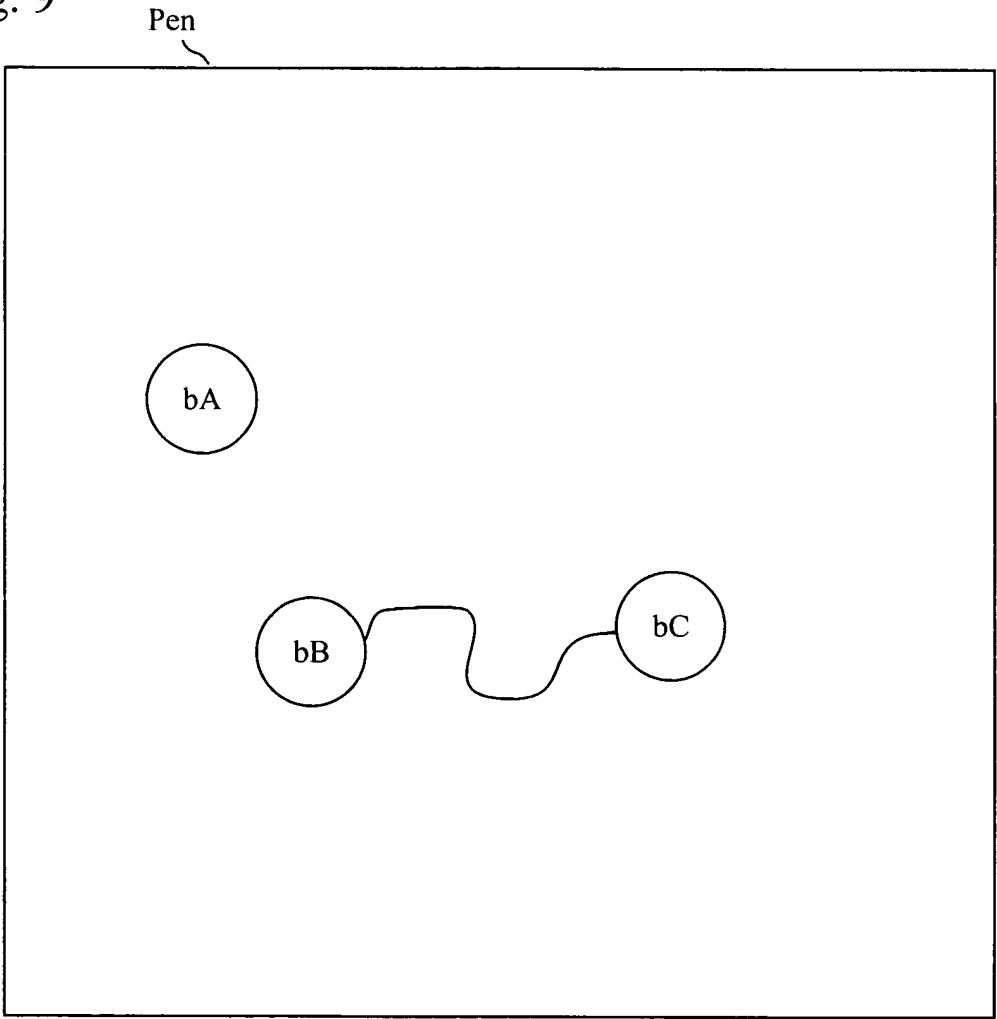


Fig.10

vRowId	v0	v1	v2	v3	v4	v5	wtRef	wtCur
0	1.50	-0.87	1	1	1	5	1	0.10
1	1.50	0.87	1	4	1	6	1	0.10
2	2.50	-2.60	-1	2	1	2	1	0.37
3	2.50	2.60	1	7	1	5	1	0.37
4	3.50	-3.28	-1	-1	-1	7	1	1.93
5	3.50	3.28	1	-1	-1	7	1	1.93
6	4.50	-3.57	1	-1	1	1	1	1.93
7	4.50	3.57	-1	-1	1	4	1	1.93
8	5.50	-3.57	-1	2	1	3	1	0.50
9	5.50	3.57	1	5	1	6	1	0.50
10	6.50	-3.28	-1	6	1	3	1	0.50
11	6.50	3.28	1	1	1	4	1	0.50
12	7.50	-2.60	-1	5	1	2	1	0.37
13	7.50	2.60	-1	3	1	1	1	0.37
14	8.50	-0.87	-1	4	1	-1	1	2.31
15	8.50	0.87	1	3	1	-1	1	2.31

Fig. 11A

vRowId	v0Bin	v1Bin	v2Bin	v3Bin	v4Bin	v5Bin
0	0	3	1	1	1	1
1	0	4	1	1	1	1
2	1	1	0	1	1	1
3	1	6	1	1	1	1
4	2	0	0	0	0	1
5	2	7	1	0	0	1
6	3	0	1	0	1	1
7	3	7	0	0	1	1
8	4	0	0	1	1	1
9	4	7	1	1	1	1
10	5	0	0	1	1	1
11	5	7	1	1	1	1
12	6	1	0	1	1	1
13	6	6	0	1	1	1
14	7	3	0	1	1	0
15	7	4	1	1	1	0

Fig. 11B

v3BinB	v5BinB
0	2
2	3
1	1
3	2
0	3
0	3
0	0
0	2
1	1
2	3
3	1
0	2
2	1
1	0
2	0
1	0

Fig. 12

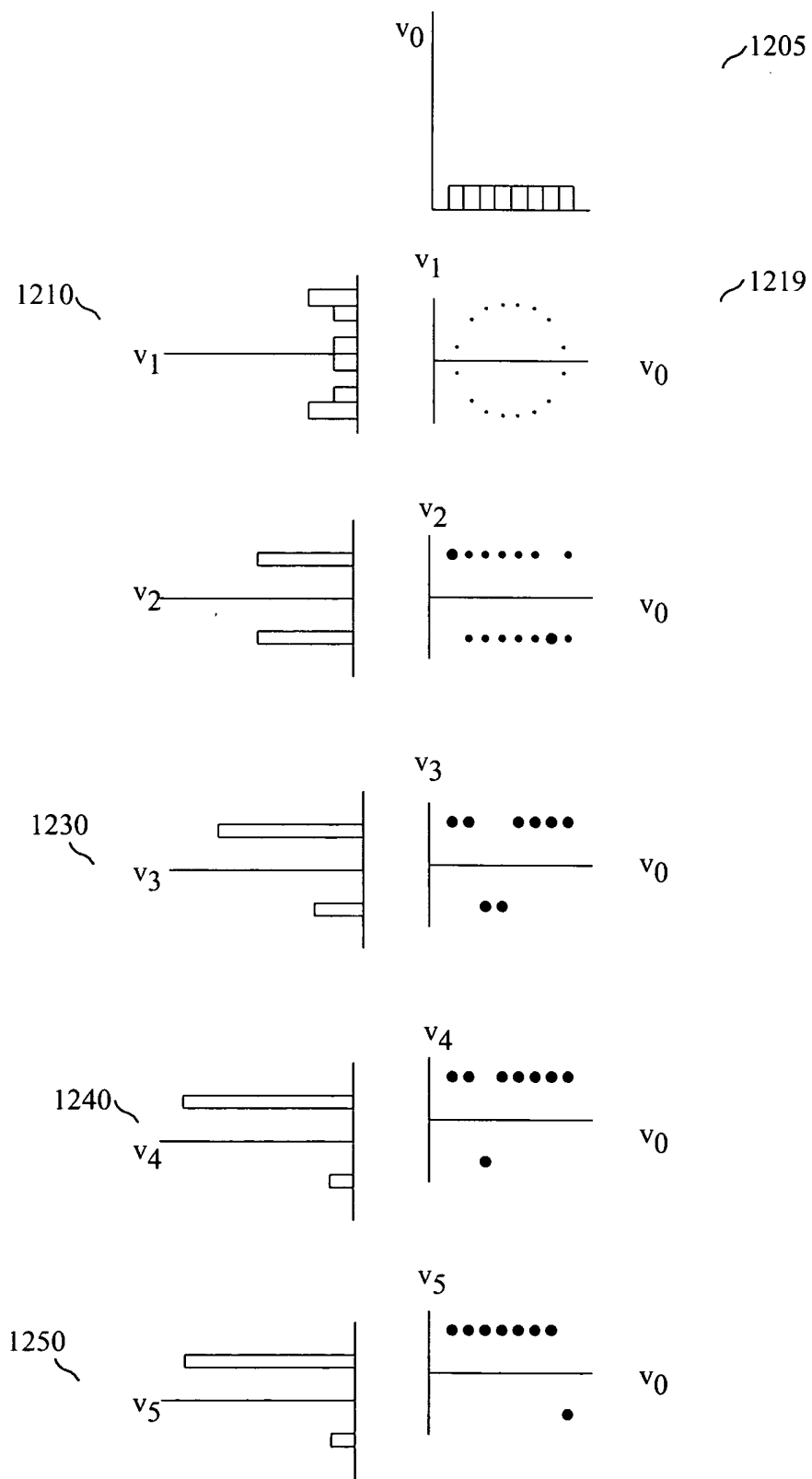


Fig. 13

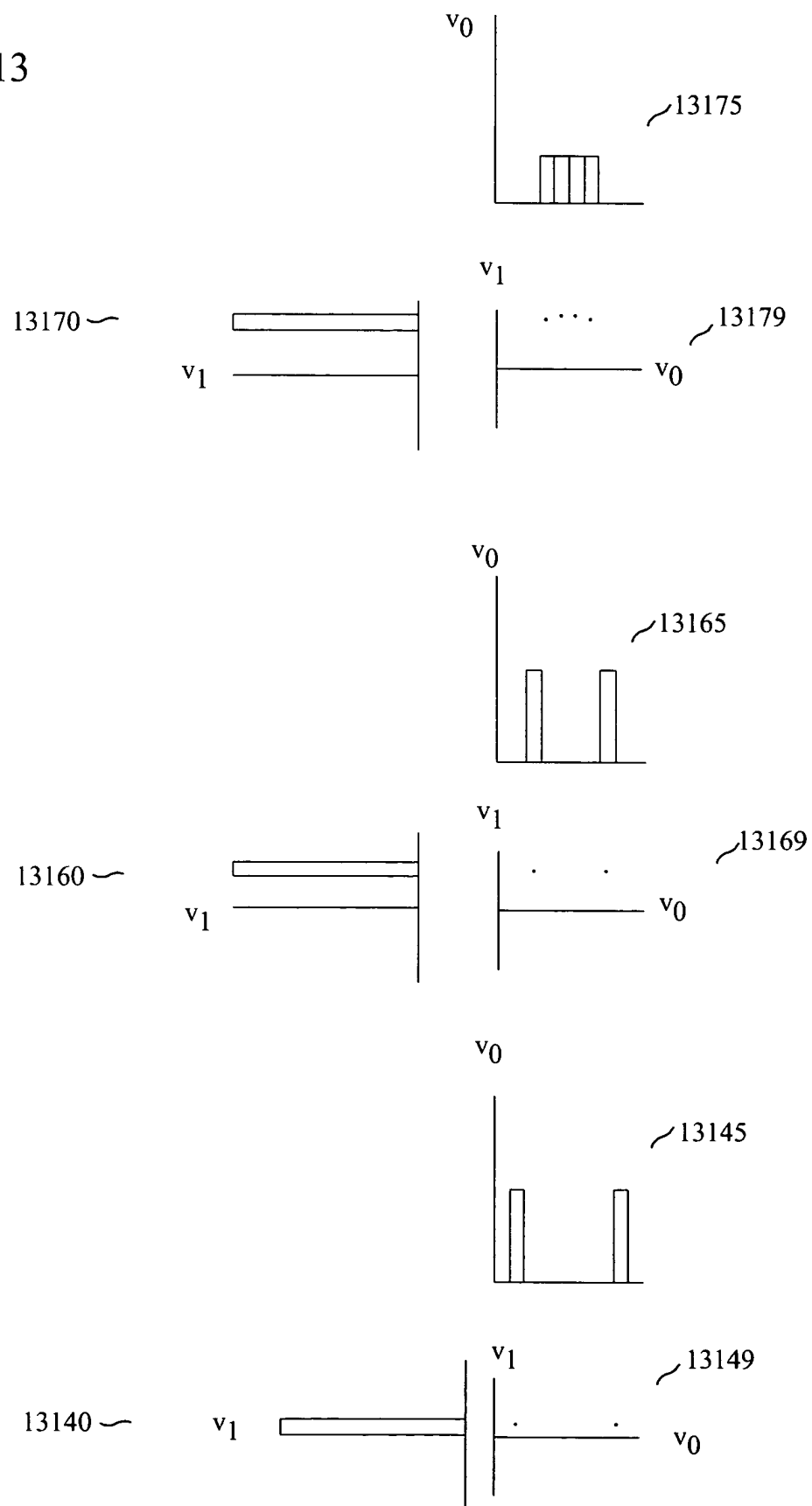


Fig. 14

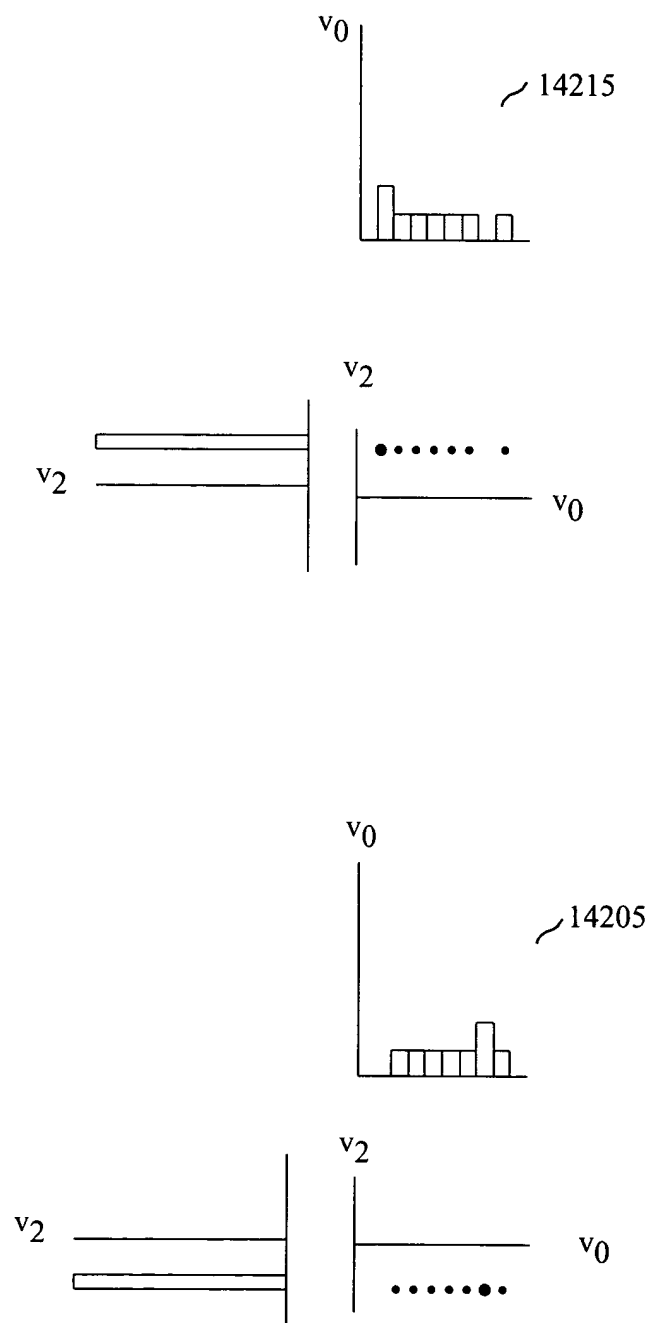


Fig. 15

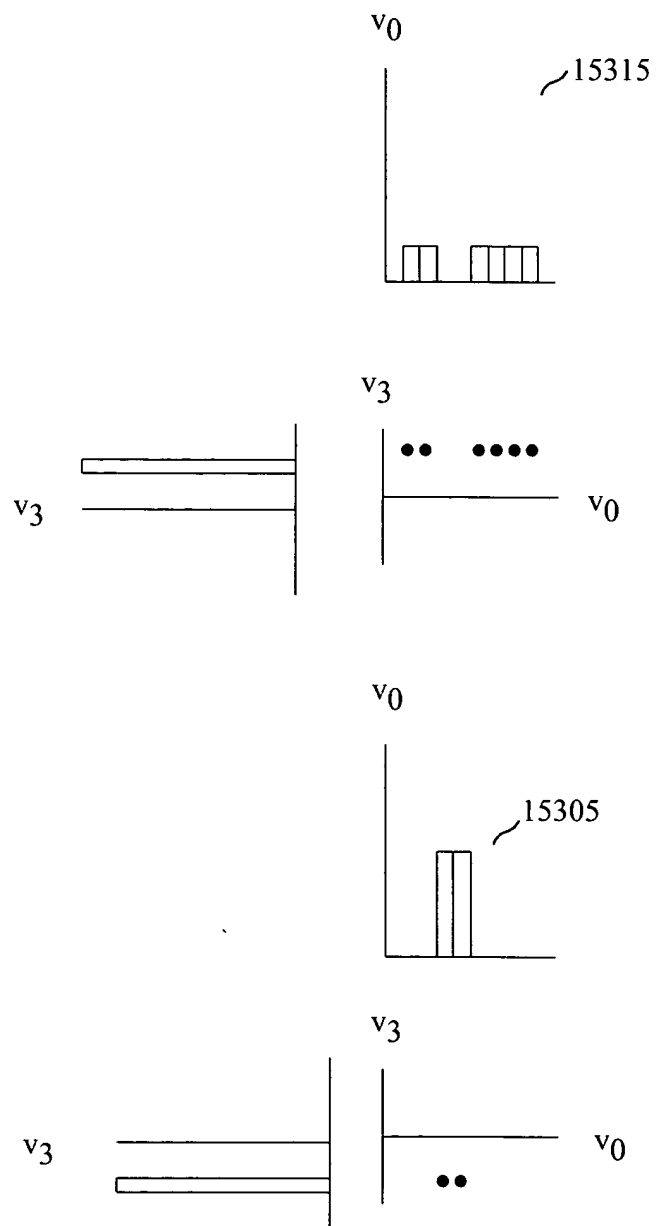


Fig. 16

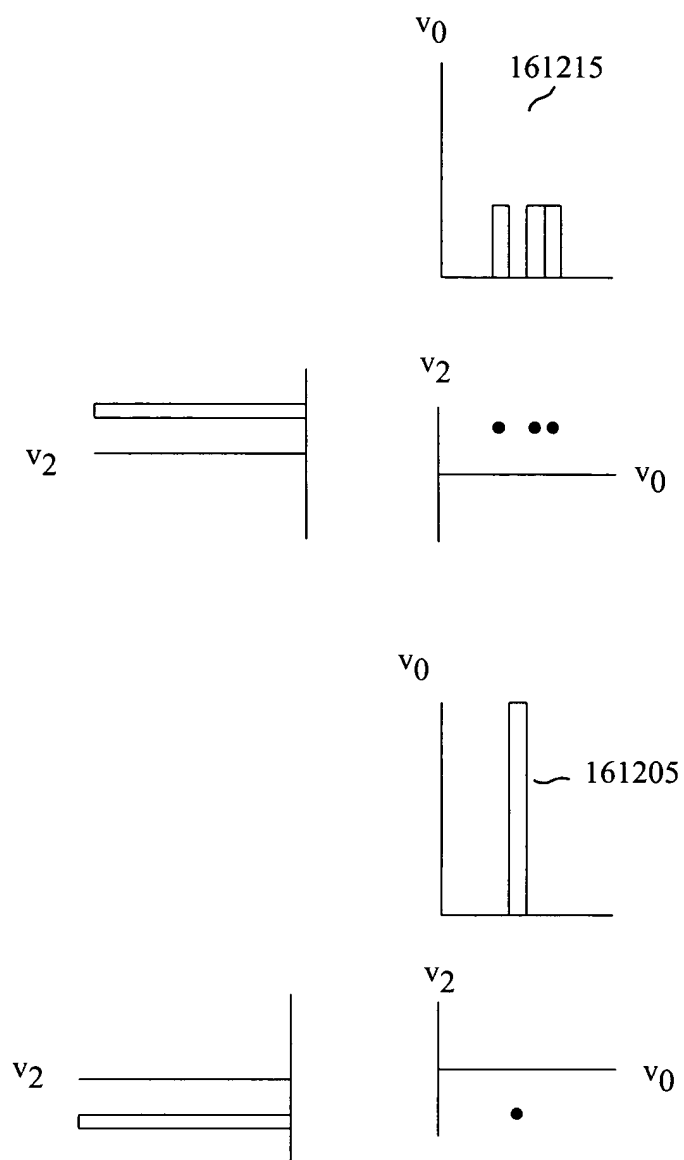


Fig. 17

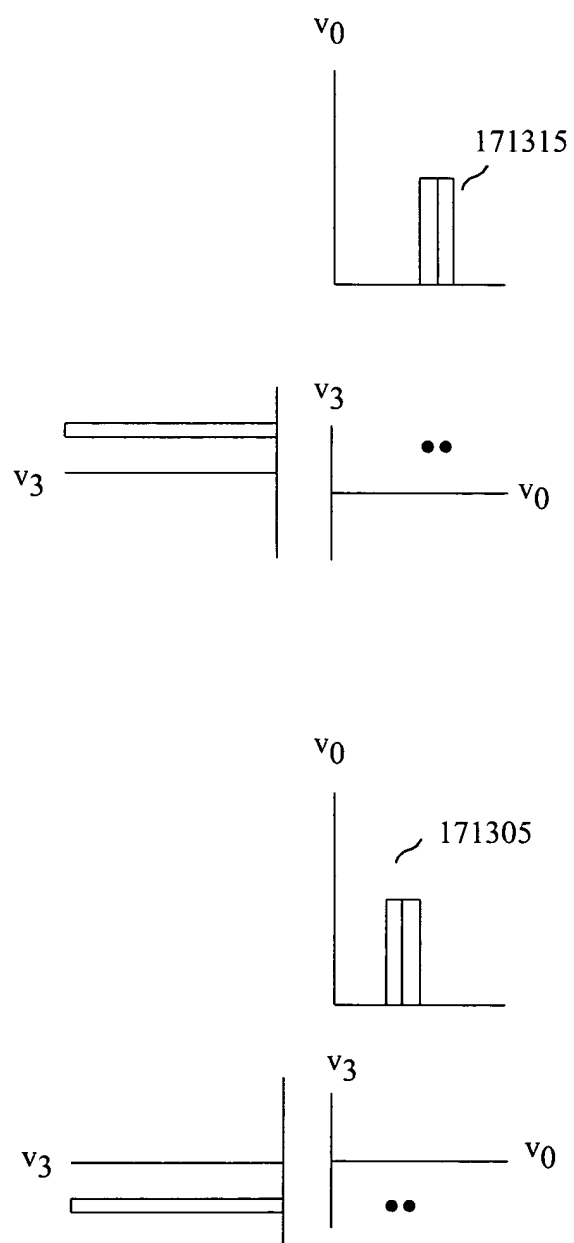


Fig. 18

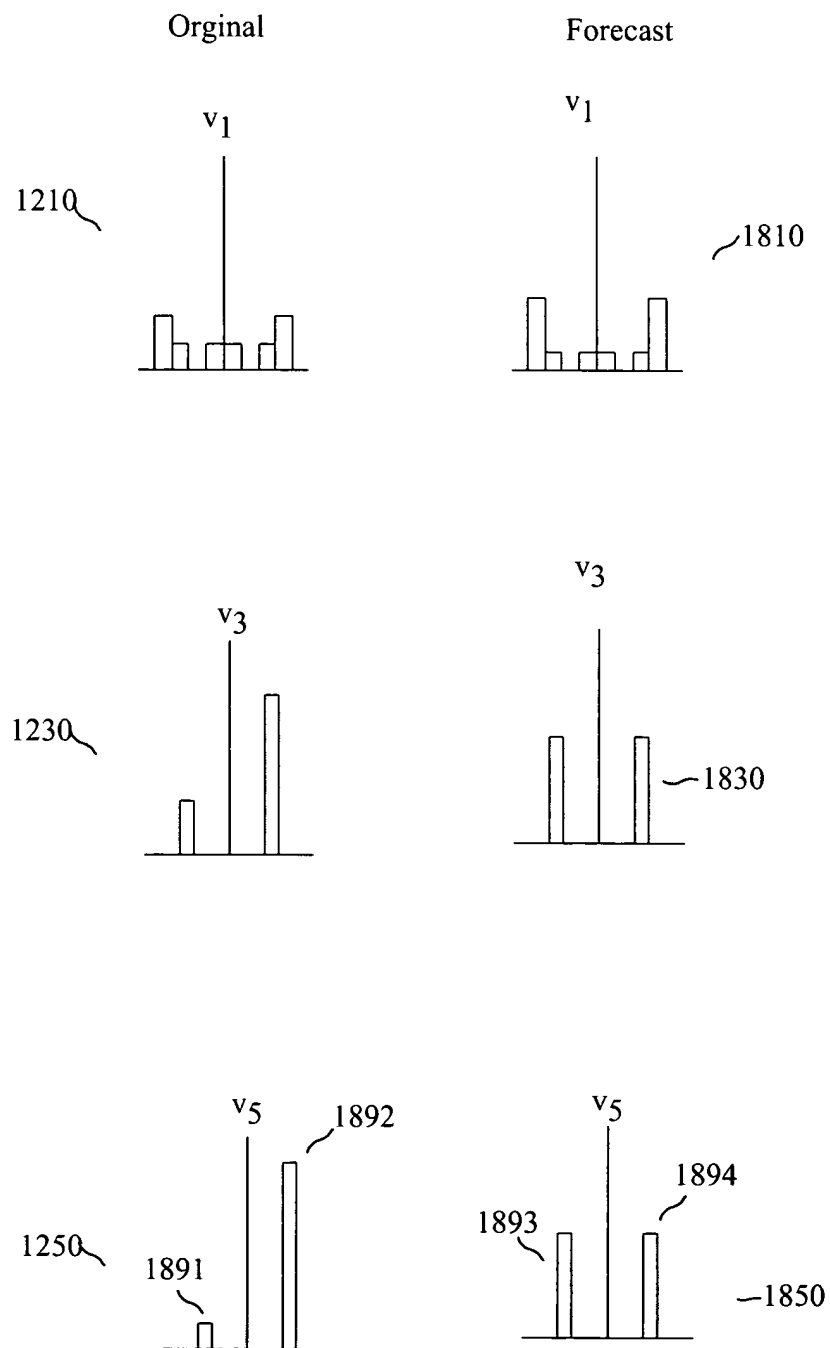


Fig. 19

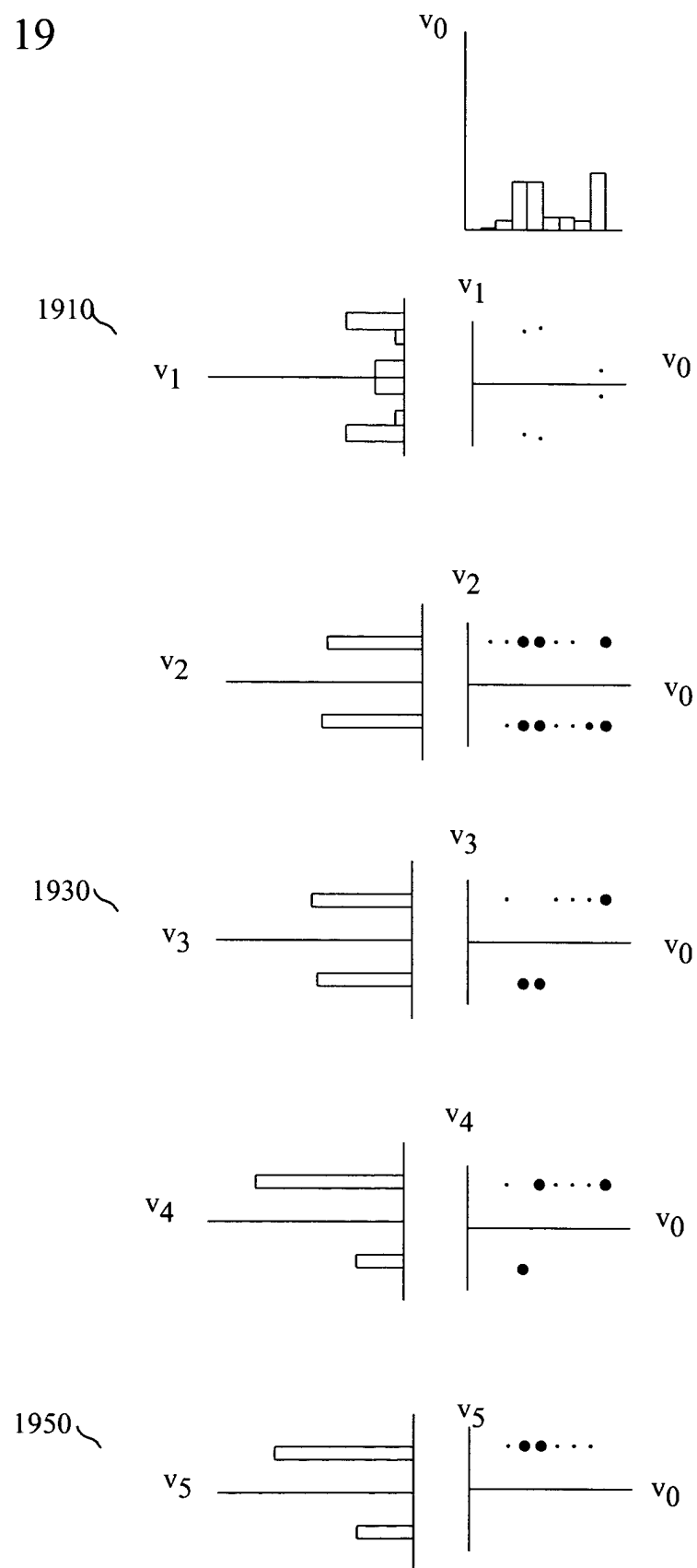


Fig. 20

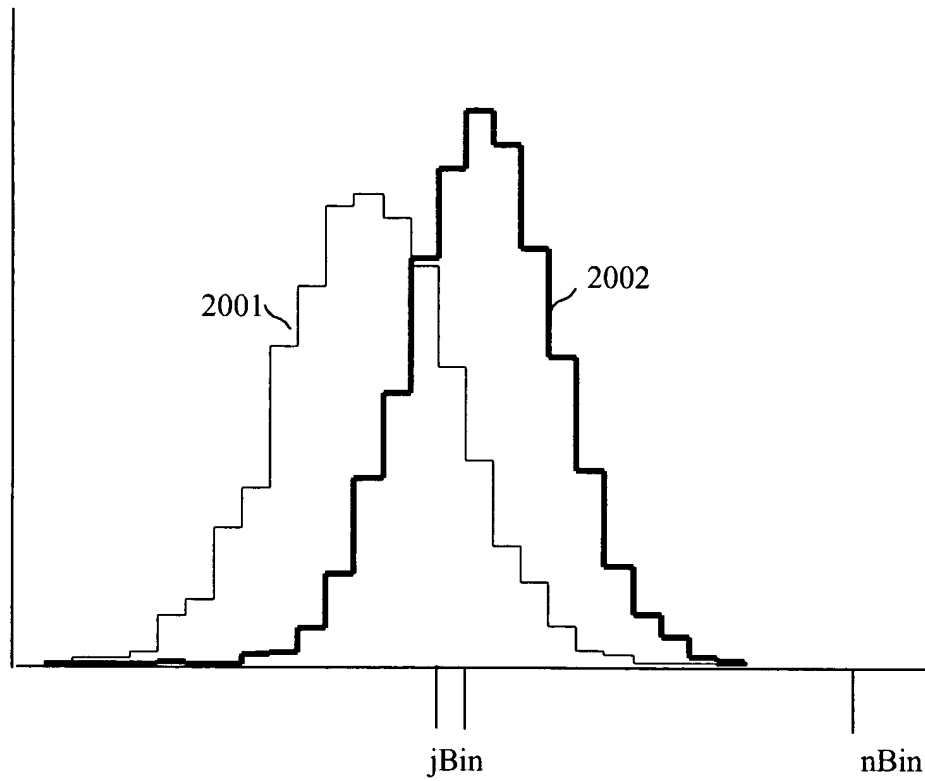


Fig. 21

```
Distribution-BinComparer(  
    PCDistribution benchmark-Distribution,  
    PCDistribution refined-Distribution,  
    long jBinManifest  
)
```


Fig. 22

Name	Description	Primary Usage
DBC-SP	Stochastic Programming	Explanatory-Tracking
DBC-BB	Betting Based	Explanatory-Tracking
DBC-GRB	Grim Repeat Bet	Explanatory-Tracking
DBC-FP	Forecast Performance	Explanatory-Tracking Forecast-Performance Evaluation
DBC-G2	Standard Information Theory G2	CIPFP
DBC-D2	Distance Squared	Explanatory-Tracking

Fig. 23

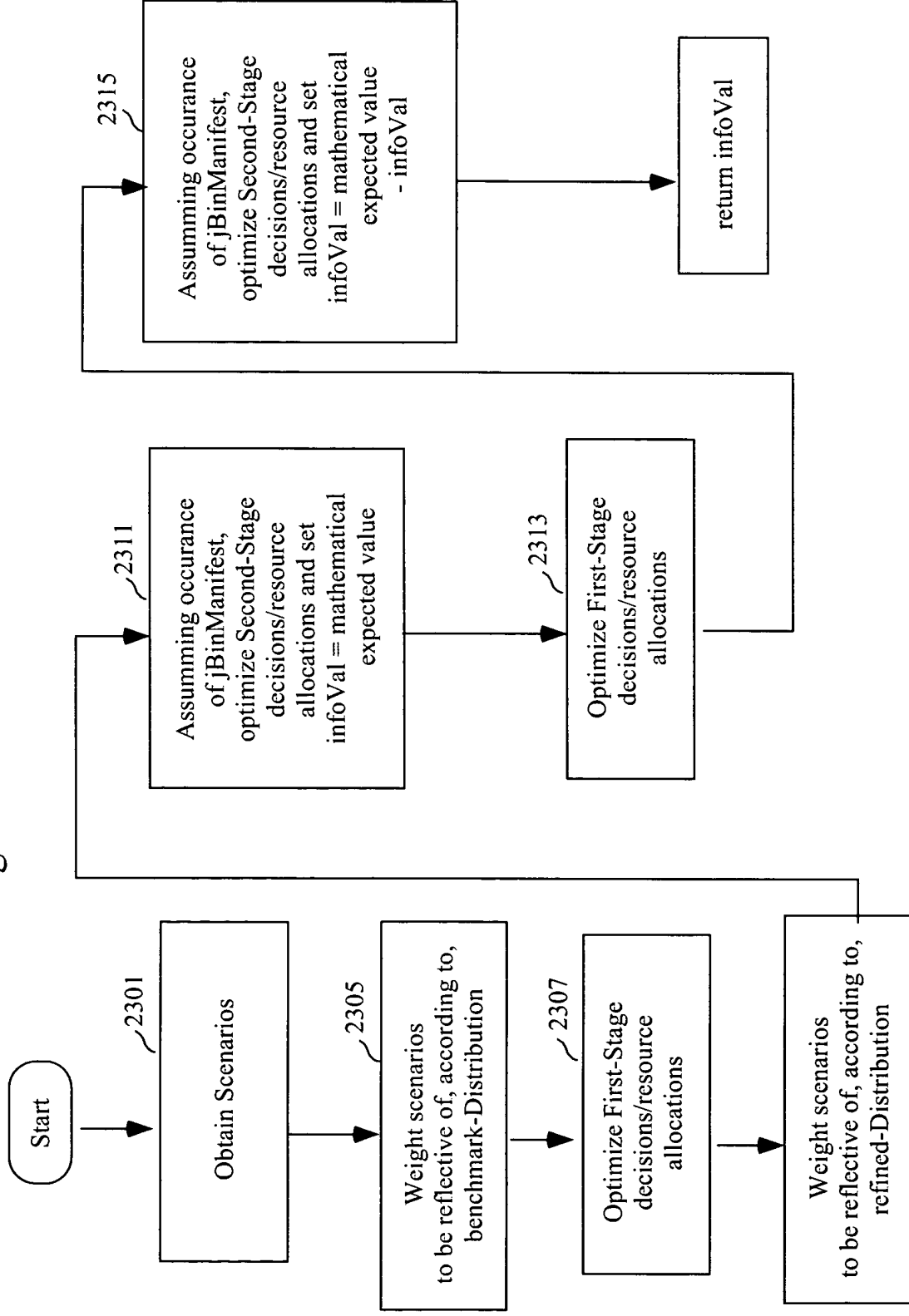


Fig. 24

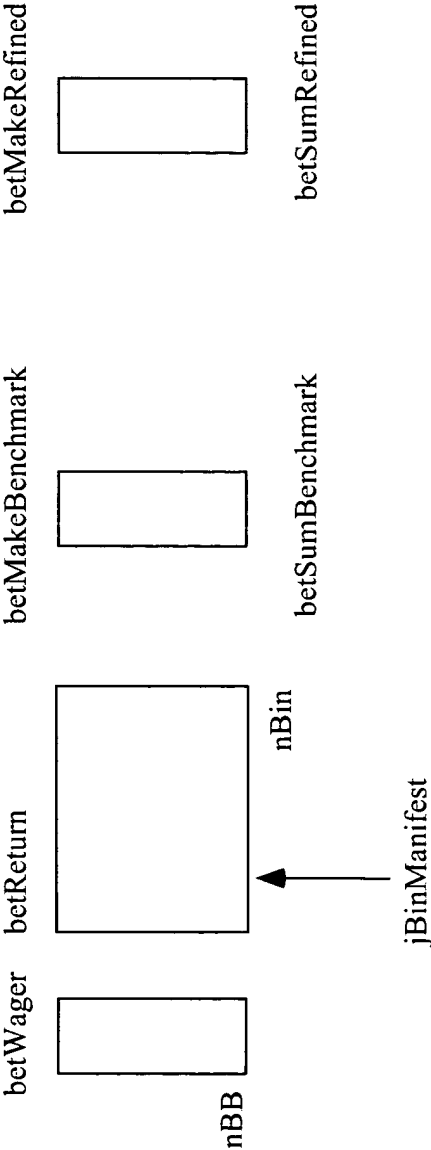


Fig. 25

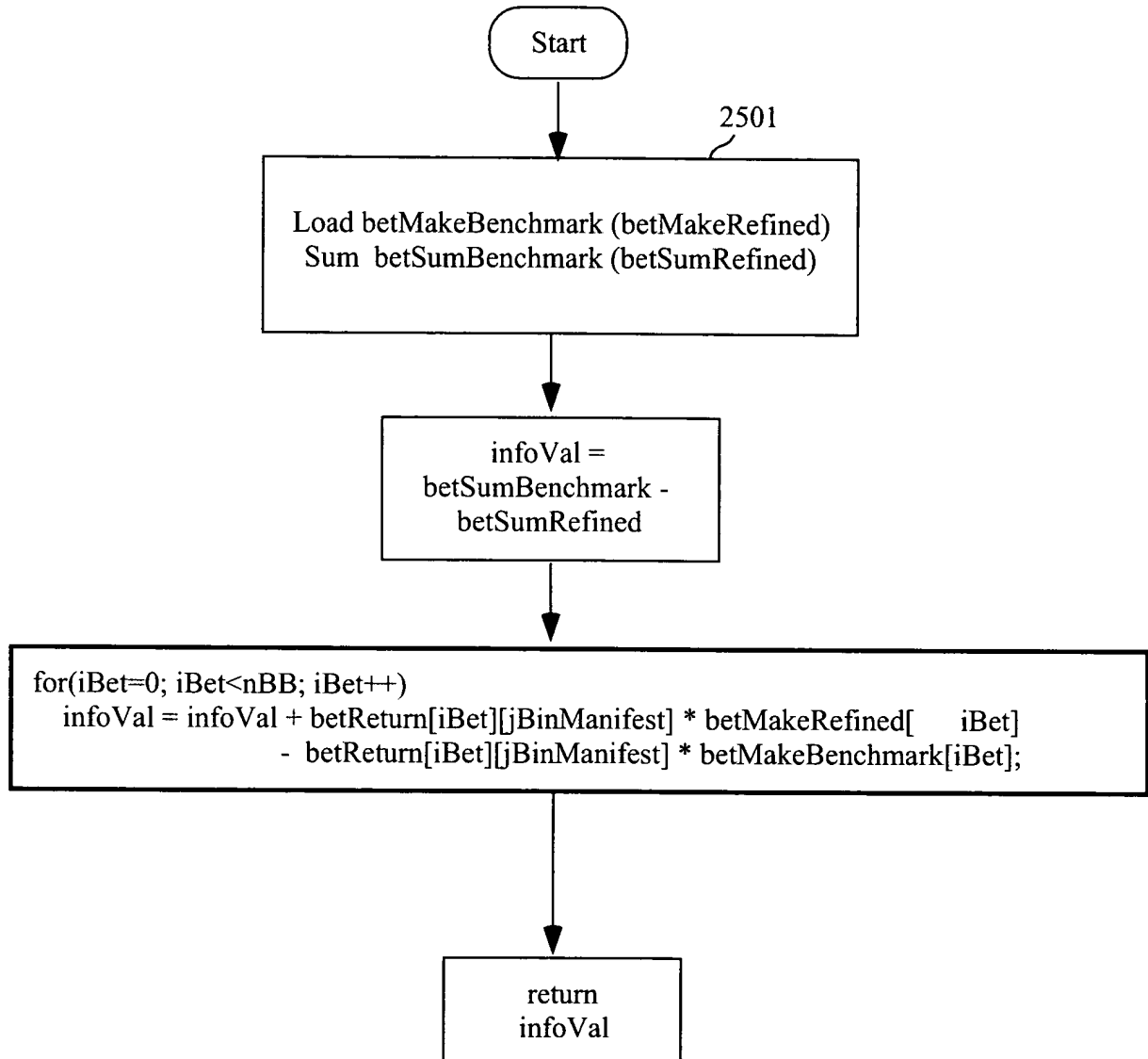


Fig. 26

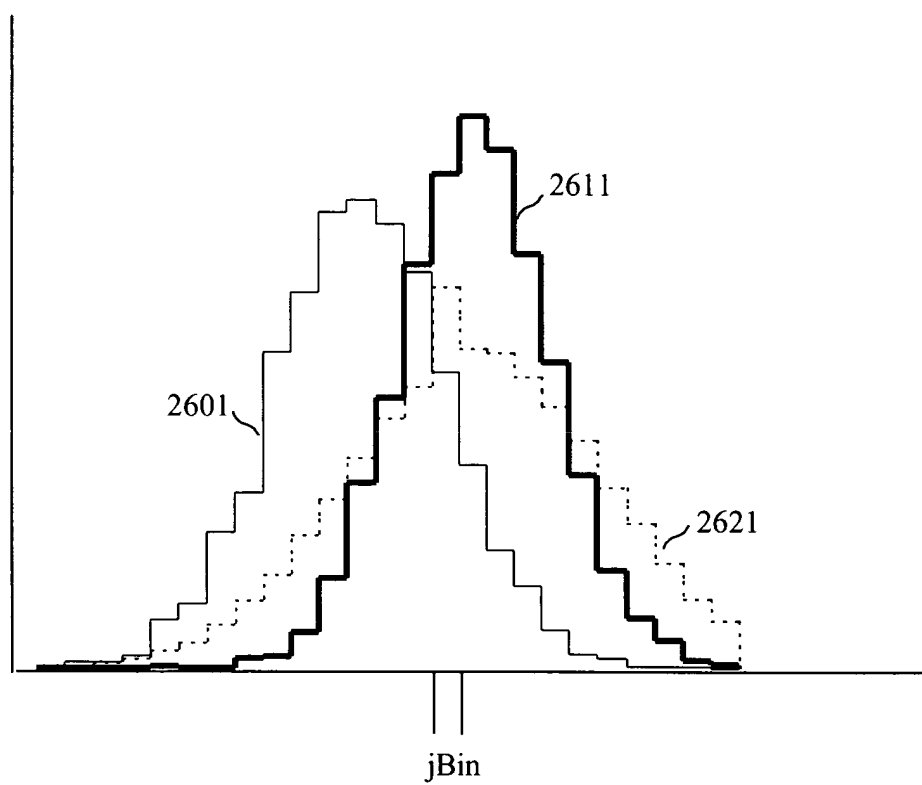
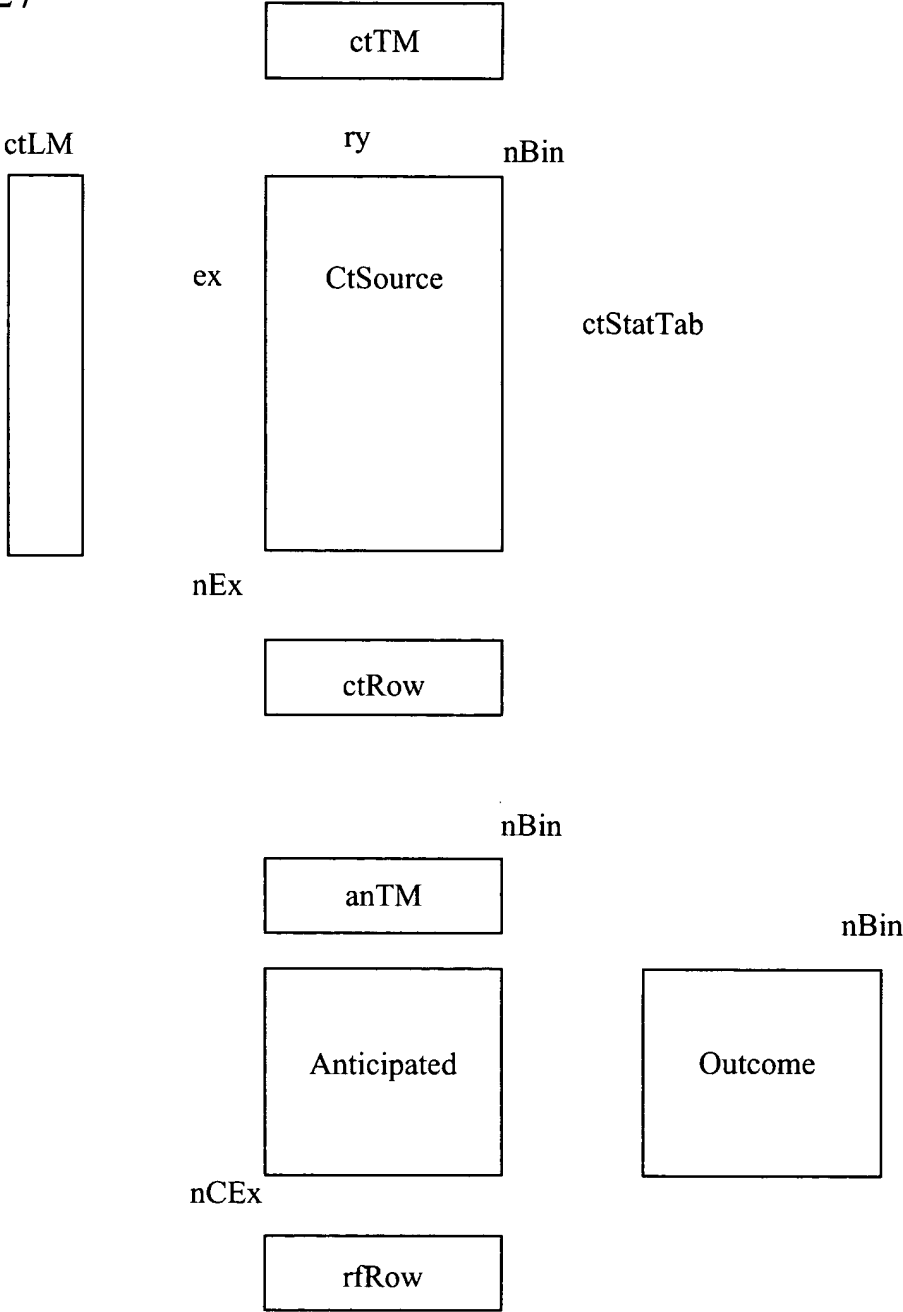


Fig. 27



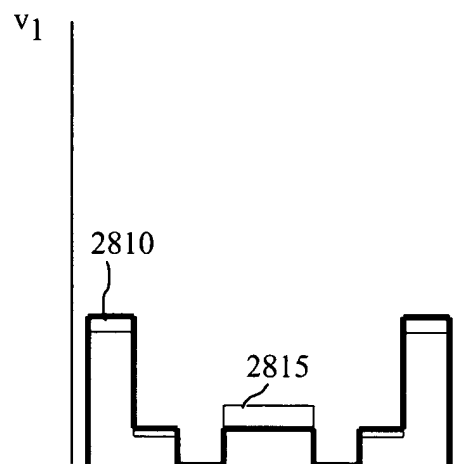
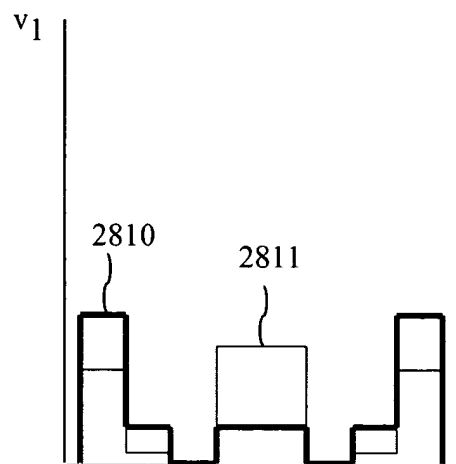


Fig. 28

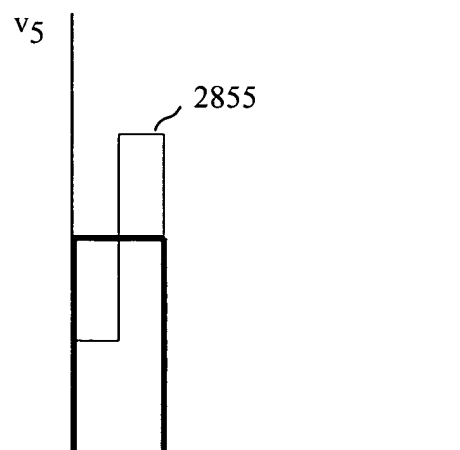
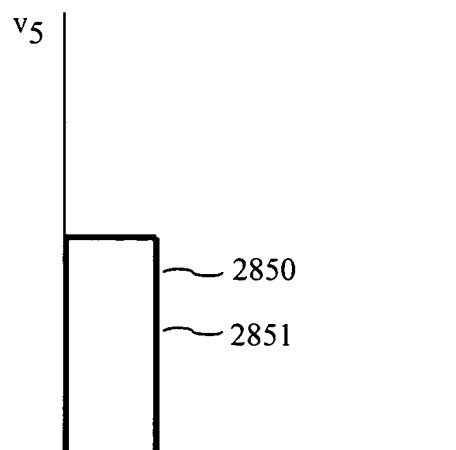
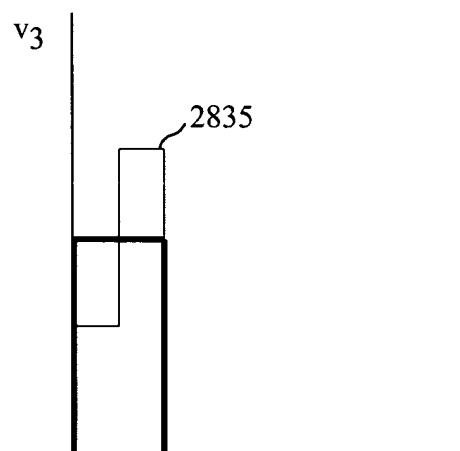
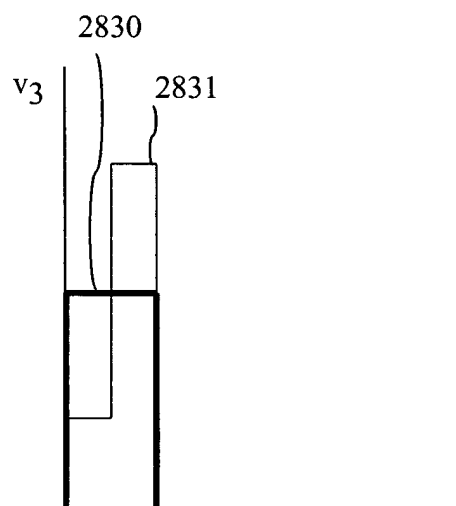
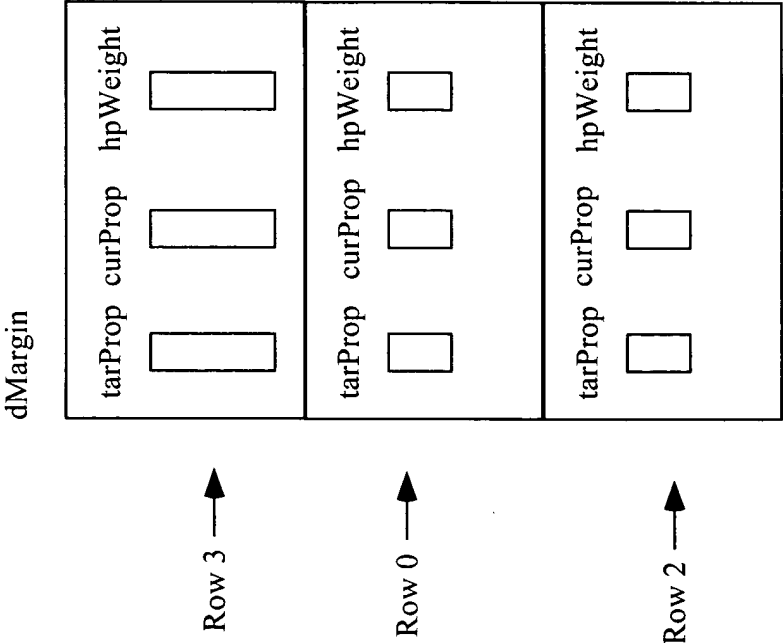


Fig. 29

External LPPHC



v1Bin	v3BinB	v5BinB	wtRef
3	0	2	1
4	2	3	1
1	1	1	1
6	3	2	1
0	0	3	1
7	0	3	1
0	0	0	1
7	0	2	1
0	1	1	1
7	2	3	1
0	3	1	1
7	0	2	1
1	2	1	1
6	1	0	1
3	2	0	1
4	1	0	1

Fig. 30

dMargin

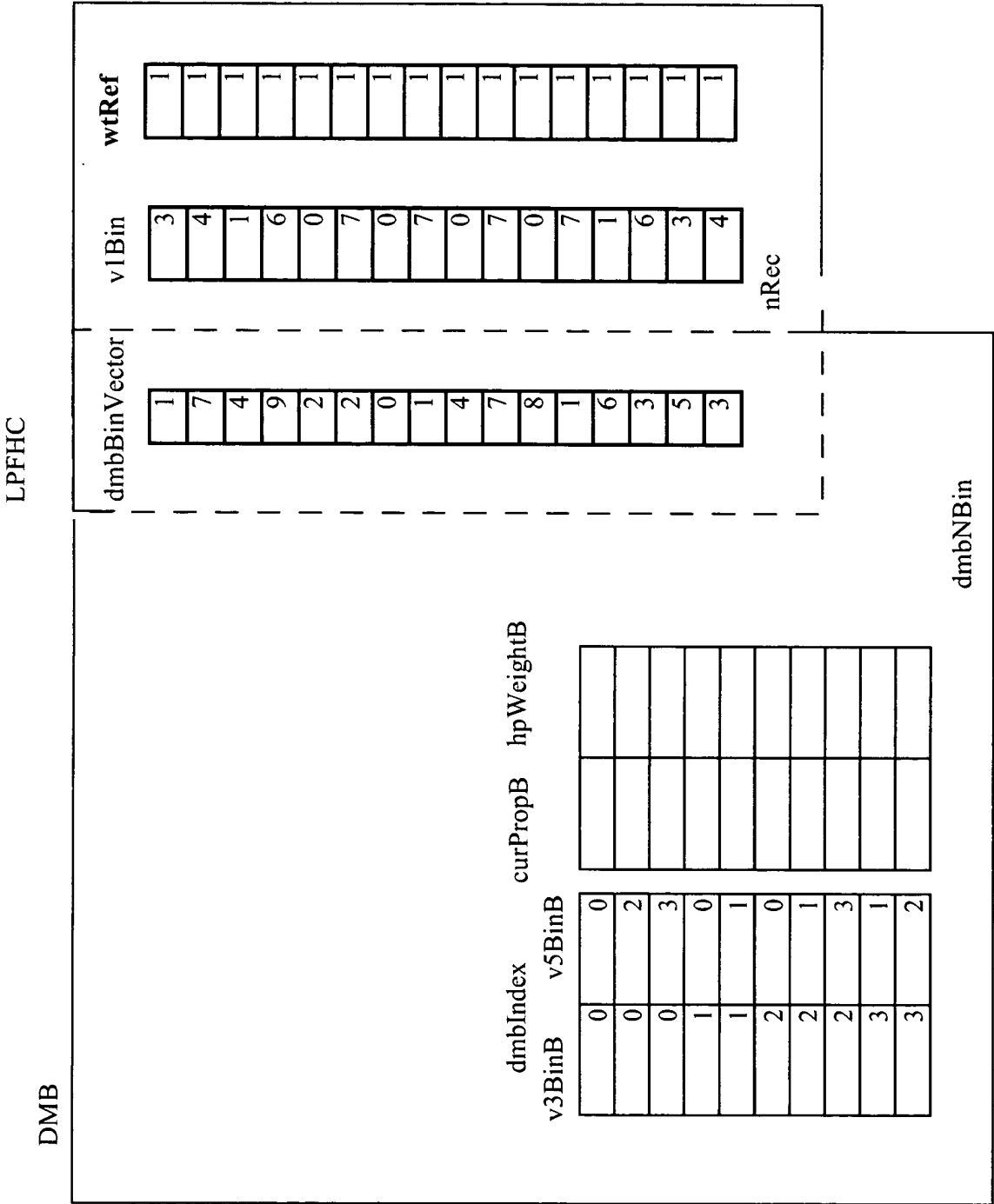
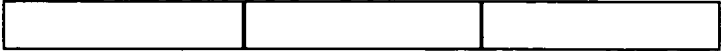


Fig. 31

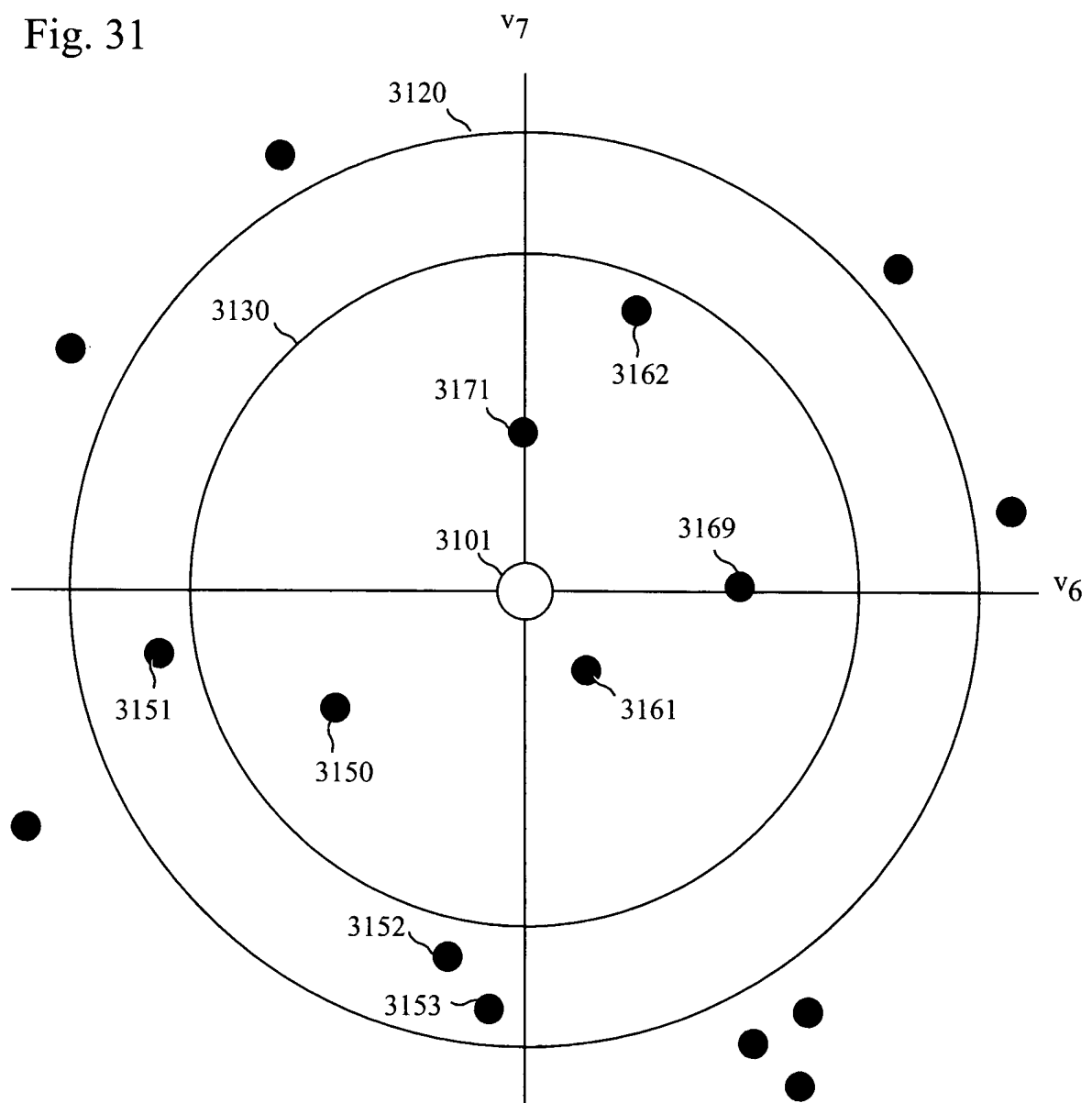


Fig. 32

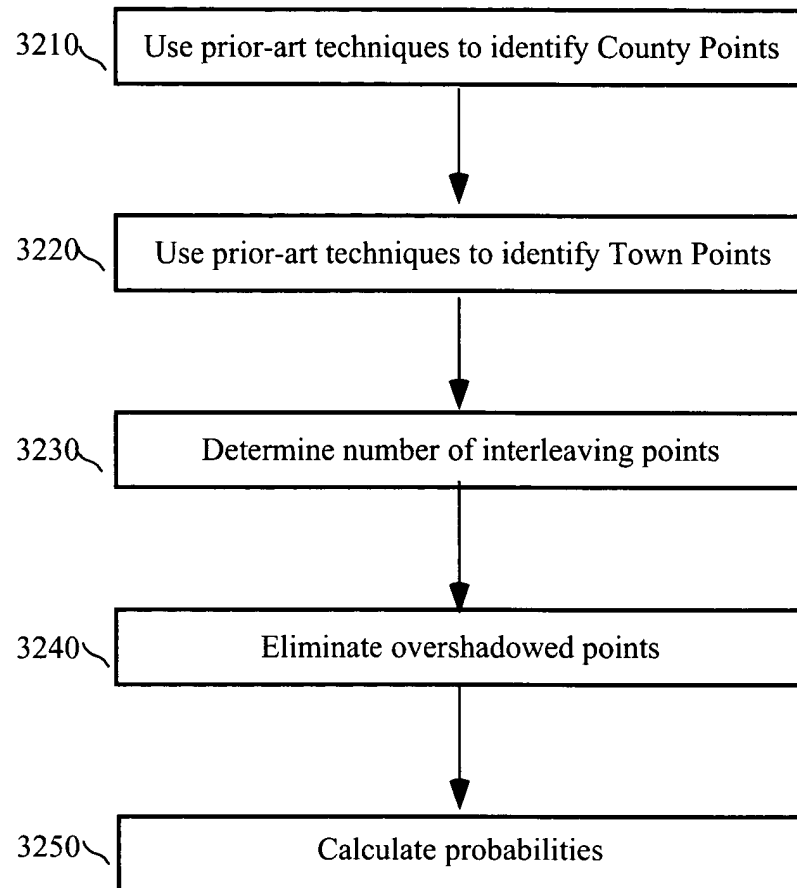
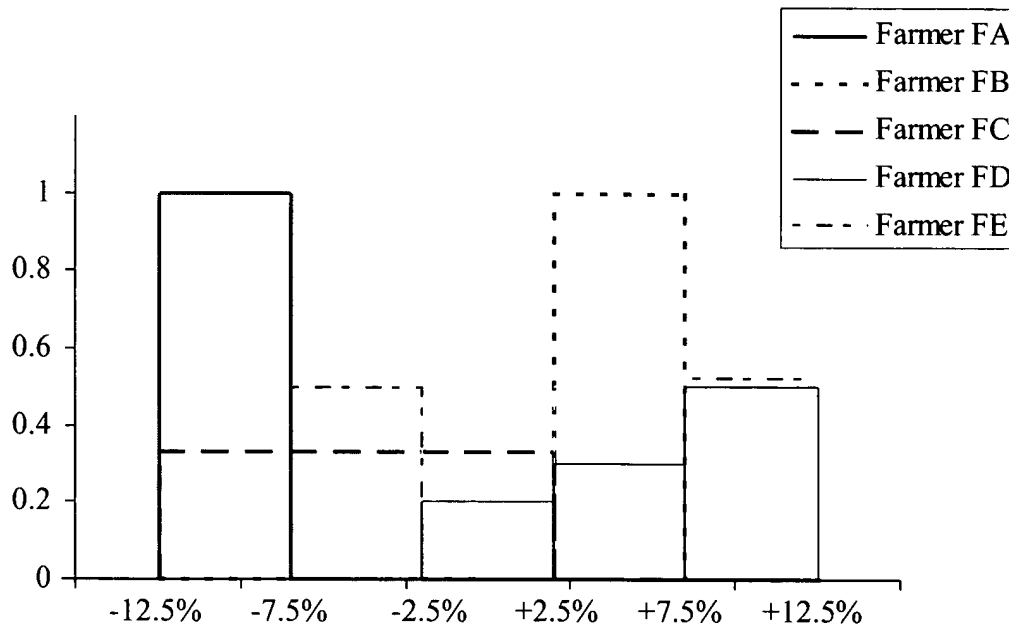


Fig. 33



Estimated Probabilities for Change in Artichoke Market Size
for the Upcoming Year as compared with the Previous Year

Fig. 34

traderID	cQuant	AC-DistributionMatrix					Total
		bin1	bin2	bin3	bin4	bin5	
Farmer FA	1,000	1.000	0.000	0.000	0.000	0.000	1.000
Farmer FB	1,000	0.000	0.000	0.000	1.000	0.000	1.000
Farmer FC	1,000	0.333	0.333	0.333	0.000	0.000	1.000
Farmer FD	1,000	0.000	0.000	0.200	0.300	0.500	1.000
Farmer FE	1,000	0.000	0.500	0.000	0.500	0.000	1.000

Fig. 35

arithMean-Distribution	Total
0.667 0.417 0.267 0.600 0.500	2.450

Fig. 36

	Total
1.000 0.417 0.267 0.600 0.500	2.783

Fig. 37

traderID	cQuant	C-DistributionMatrix					Total
		bin1	bin2	bin3	bin4	bin5	
Farmer FA	1,000	0.359	0.150	0.096	0.216	0.180	1.000
Farmer FB	1,000	0.234	0.146	0.094	0.351	0.175	1.000
Farmer FC	1,000	0.159	0.159	0.159	0.286	0.238	1.000
Farmer FD	1,000	0.320	0.200	0.096	0.144	0.240	1.000
Farmer FE	1,000	0.274	0.205	0.110	0.205	0.205	1.000

Fig. 38

geoMean-Distribution					Total
0.259	0.170	0.108	0.230	0.206	0.973

Fig. 39

traderID	PayOffMatrix					Mathematically-Expected Return
	bin1	bin2	bin3	bin4	bin5	
Farmer FA	-326.580	128.257	123.514	63.493	136.422	-48.106
Farmer FB	102.555	151.927	147.184	-423.663	160.092	-60.595
Farmer FC	490.321	69.689	-381.341	-218.219	-145.290	-68.581
Farmer FD	-210.795	-161.423	121.516	466.960	-153.258	-57.613
Farmer FE	-55.502	-188.451	-10.873	111.428	2.035	-31.806
Total	0.000	0.000	0.000	0.000	0.000	

Fig. 40

align-Distribution

0.325	0.207	0.091	0.141	0.236
-------	-------	-------	-------	-------

Fig. 41

Farmer FF's Farming-Business
Contingent-Operating Return
(binOperatingReturn)

Mathematically-
Expected Return

-48.000	270.000	414.000	428.000	510.000
---------	---------	---------	---------	---------

258.710

Fig. 42

cQuant

1648.120

angle-Distribution

0.215	0.171	0.119	0.255	0.240
-------	-------	-------	-------	-------

Fig. 43

PayOffRow

Mathematically-
Expected Return

306.711	-11.289	-155.289	-169.289	-251.289
---------	---------	----------	----------	----------

0.000

Fig. 44

Mathematically-
Expected Return

258.711	258.711	258.711	258.711	258.711
---------	---------	---------	---------	---------

258.710

Fig. 45

align-Distribution

0.054	0.095	0.110	0.311	0.430
-------	-------	-------	-------	-------

Fig. 46

cQuant

12.000

angle-Distribution

0.295	0.179	0.108	0.224	0.194
-------	-------	-------	-------	-------

Fig. 47

cQuant

100.000

PayOffRow

-13.109	-4.841	0.135	2.512	6.143
---------	--------	-------	-------	-------

Mathematically-
Expected Return

2.273

Fig. 48

traderID	cQuant	C-DistributionMatrix					Total
		bin1	bin2	bin3	bin4	bin5	
Farmer FA	1000.000	0.359	0.150	0.096	0.216	0.180	1.000
Farmer FB	1000.000	0.234	0.146	0.094	0.351	0.175	1.000
Farmer FC	1000.000	0.159	0.159	0.159	0.286	0.238	1.000
Farmer FD	1000.000	0.320	0.200	0.096	0.144	0.240	1.000
Farmer FE	1000.000	0.274	0.205	0.110	0.205	0.205	1.000
Farmer FF	1648.120	0.215	0.171	0.119	0.255	0.240	1.000
Speculator SG	100.000	0.295	0.179	0.108	0.224	0.194	1.000

Fig. 49

geoMean-Distribution					Total
0.248	0.171	0.111	0.235	0.214	0.979

Fig. 50

traderID	PayOffMatrix					Mathematically- Expected Return
	bin1	bin2	bin3	bin4	bin5	
Farmer FA	-370.088	130.648	146.506	88.208	172.750	-49.324
Farmer FB	59.046	154.317	170.176	-398.948	196.420	-53.227
Farmer FC	446.812	72.079	-358.349	-193.504	-108.962	-55.748
Farmer FD	-254.303	-159.032	144.508	491.675	-116.930	-56.573
Farmer FE	-99.010	-186.061	12.119	136.142	38.363	-28.172
Farmer FF	235.003	-7.350	-117.395	-128.556	-191.416	0.842
Speculator SG	-17.460	-4.602	2.434	4.984	9.776	4.648
Total	0.000	0.000	0.000	0.000	0.000	

Fig. 51

Leg Table

traderID	PayOffMatrixMaster					okSell	cashAsk
	bin1	bin2	bin3	bin4	bin5		
Farmer FA	-326.580	128.257	123.514	63.493	136.422	Yes	-43.893
Farmer FB	102.555	151.927	147.184	-423.663	160.092	No	-54.446
Farmer FC	490.321	69.689	-381.341	-218.219	-145.290	Yes	65.000
Farmer FD	-210.795	-161.423	121.516	466.960	-153.258	Yes	-48.677
Farmer FE	-55.502	-188.451	-10.873	111.428	2.035	Yes	-29.929
Farmer FF	306.711	-11.289	-155.289	-169.289	-251.289	No	0.000
Farmer FF	-306.711	11.289	155.289	169.289	251.289	Yes	0.000
Speculator SH	0.000	0.000	0.000	0.000	0.000	No	0.000
Speculator SH	0.000	0.000	0.000	0.000	0.000	Yes	0.000
Speculator SI	0.000	0.000	0.000	15.000	10.000	Yes	8.244
Speculator SI	0.000	0.000	0.000	-15.000	-10.000	Yes	-8.244
Total	0.000	0.000	0.000	0.000	0.000		

Fig. 52

Stance Table

traderID	VB-DistributionMatrix					okBuy	cashPool	discount	MaxFutLiability				
	bin1	bin2	bin3	bin4	bin5				bin1	bin2	bin3	bin4	bin5
Farmer FA	0.354	0.149	0.095	0.213	0.190	Yes	10	0.030	30	60	90	120	150
Farmer FB	0.235	0.145	0.091	0.348	0.181	No	0	0.090	30	60	90	120	150
Farmer FC	0.167	0.155	0.158	0.279	0.241	Yes	3	0.060	30	60	90	120	150
Farmer FD	0.316	0.198	0.101	0.151	0.234	Yes	0	0.060	30	60	90	120	150
Farmer FE	0.272	0.210	0.108	0.202	0.208	Yes	2	0.090	30	60	90	120	150
Farmer FF	0.325	0.207	0.091	0.141	0.236	Yes	4	0.080	30	30	30	30	30
Speculator SH	0.054	0.095	0.110	0.311	0.430	Yes	60	0.080	100	100	100	100	100
Speculator SI	0.054	0.095	0.110	0.311	0.430	Yes	60	0.080	100	100	100	100	100

Fig. 53

Speculator SH vb-Distribution	0.054	0.095	0.110	0.311	0.430	Total
Farmer FD PayOffRow	-210.795	-161.423	121.516	466.960	-153.258	
Dot-Product	-11.383	-15.335	13.367	145.225	-65.901	65.972
					x	0.92
						60.694
					-	-48.677
					=	109.371
				ValueDisparity		

Fig. 54

Farmer FA Farmer FB Farmer FC Farmer FD Farmer FE Farmer FF Speculator SH Speculator SI

ValueDisparityMatrix

Farmer FA	0.000	0.000	77.378	21.463	37.155	18.888	123.645	123.645	67.029
Farmer FB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Farmer FC	6.459	0.000	0.000	-5.413	-35.299	3.018	-193.165	-193.165	4.739
Farmer FD	32.302	0.000	97.998	0.000	34.472	-7.670	109.371	109.155	76.616
Farmer FE	6.034	0.000	21.850	-6.401	0.000	-8.565	42.216	42.216	28.079
Farmer FF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Farmer FF	-8.050	0.000	78.057	5.026	20.155	0.000	149.414	149.414	80.413
Speculator FH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Speculator FH	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Speculator FI	-3.304	0.000	-2.045	-3.915	-3.591	-4.129	0.000	0.000	0.000
Speculator FI	3.304	0.000	2.045	3.915	3.591	4.129	0.000	0.000	3.397

vtlReturn	24.049	0.000	138.664	15.202	47.687	13.018	137.508	212.215
-----------	--------	-------	---------	--------	--------	--------	---------	---------

vtlCost	2.199	0.000	7.921	-36.935	-53.127	25.881	15.009	89.716
---------	-------	-------	-------	---------	---------	--------	--------	--------

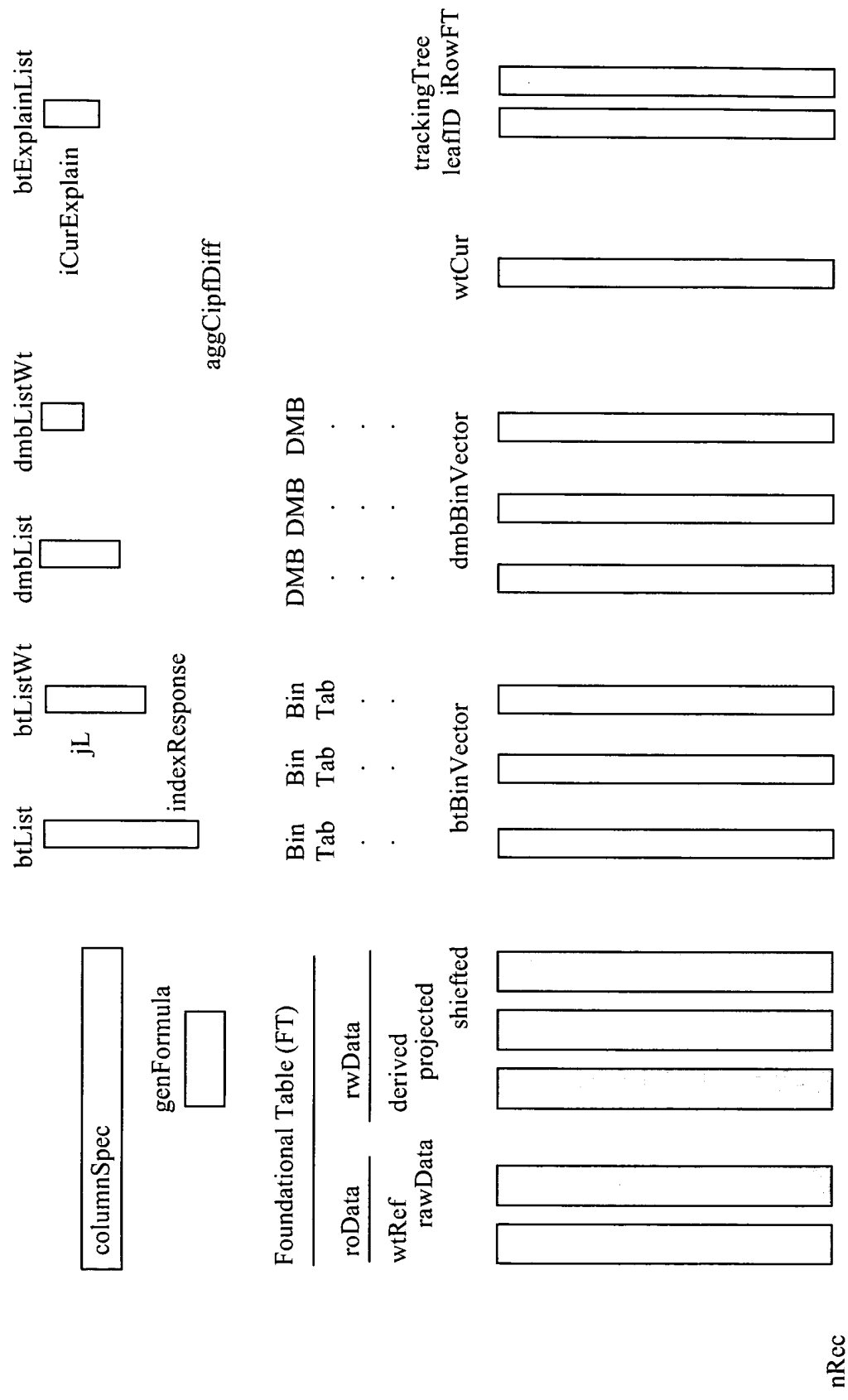
vtlYield	1093.66%	0	1750.60%	infinity	infinity	50.30%	infinity	236.54%
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Fig. 56

Stance Table

traderID	VB-DistributionMatrix					okBuy	cashPool	discount	MaxFutLiability				
	bin1	bin2	bin3	bin4	bin5				bin1	bin2	bin3	bin4	bin5
Farmer FA	0.354	0.149	0.095	0.213	0.190	Yes	10	0.030	30	60	90	120	150
Farmer FB	0.235	0.145	0.091	0.348	0.181	No	0	0.090	30	60	90	120	150
Farmer FC	0.167	0.155	0.158	0.279	0.241	Yes	3	0.060	30	60	90	120	150
Farmer FD	0.316	0.198	0.101	0.151	0.234	Yes	0	0.060	30	60	90	120	150
Farmer FE	0.272	0.210	0.108	0.202	0.208	Yes	2	0.090	30	60	90	120	150
Farmer FF	0.325	0.207	0.091	0.141	0.236	Yes	4	0.080	30	30	30	30	30
Speculator SH	0.054	0.095	0.110	0.311	0.430	Yes	35	0.080	0	104	151	155	182
Speculator SI	0.054	0.095	0.110	0.311	0.430	Yes	60	0.080	100	100	100	100	100

Fig. 57




```

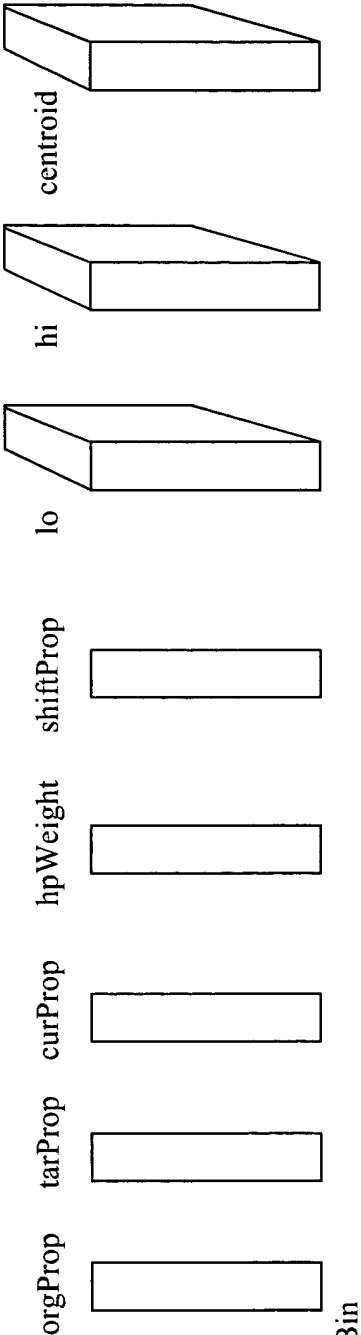
class BinTab
{
    btSpec
    LoadOrg()

```

```

    UpdateCur()
    UpdateShift()

```



btNBin

```

    btBinVector[nRec]

```

```

    indexDmbListWt

```

```

    cipfDiff
    GenCipfDiff()

```

```

    GenHpWeight()

```

```

    statTabValue
    statTabValueHyper
    CallInfoVal(...)
}

```

Fig. 58

hList	1.000
	0.900
	0.800
	0.700
	0.600
	0.500
	0.400
	0.300
	0.200
	0.100
	0.000

iHList

Fig. 59

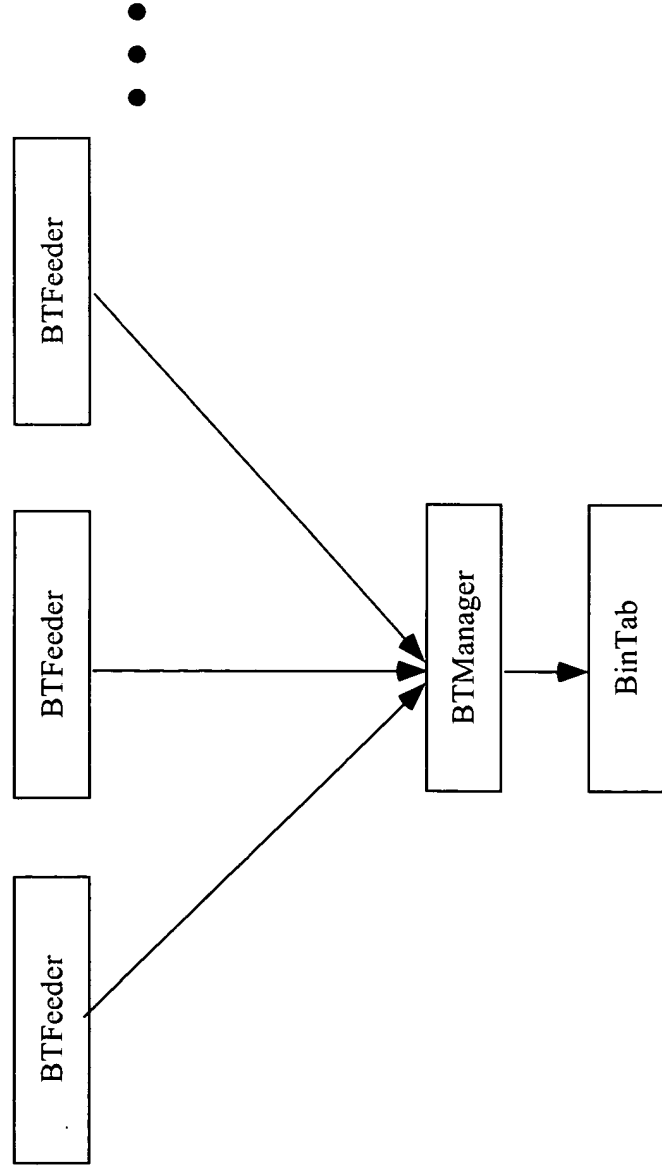


Fig. 60

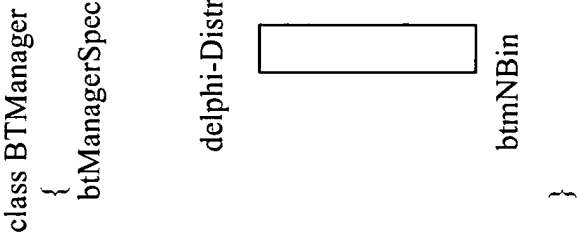


Fig. 61

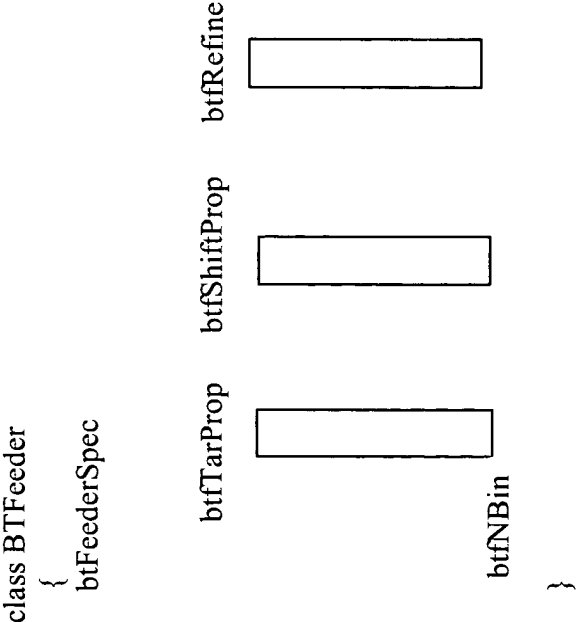


Fig. 62

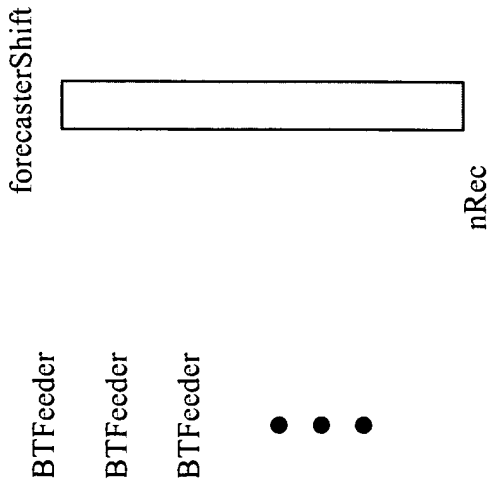


Fig. 63

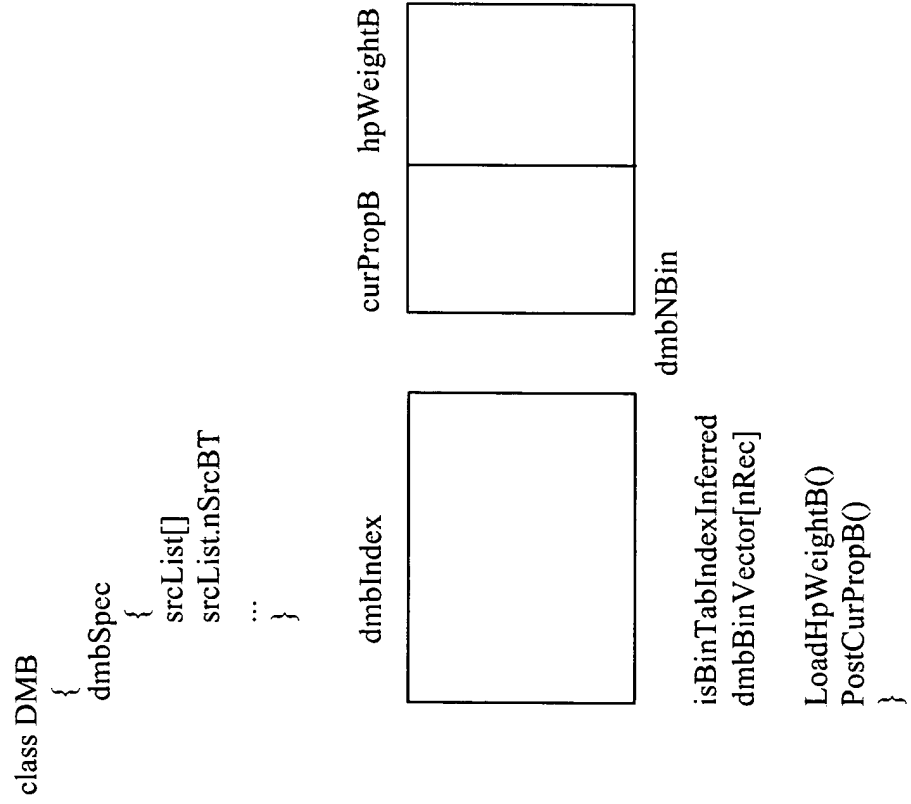


Fig. 64

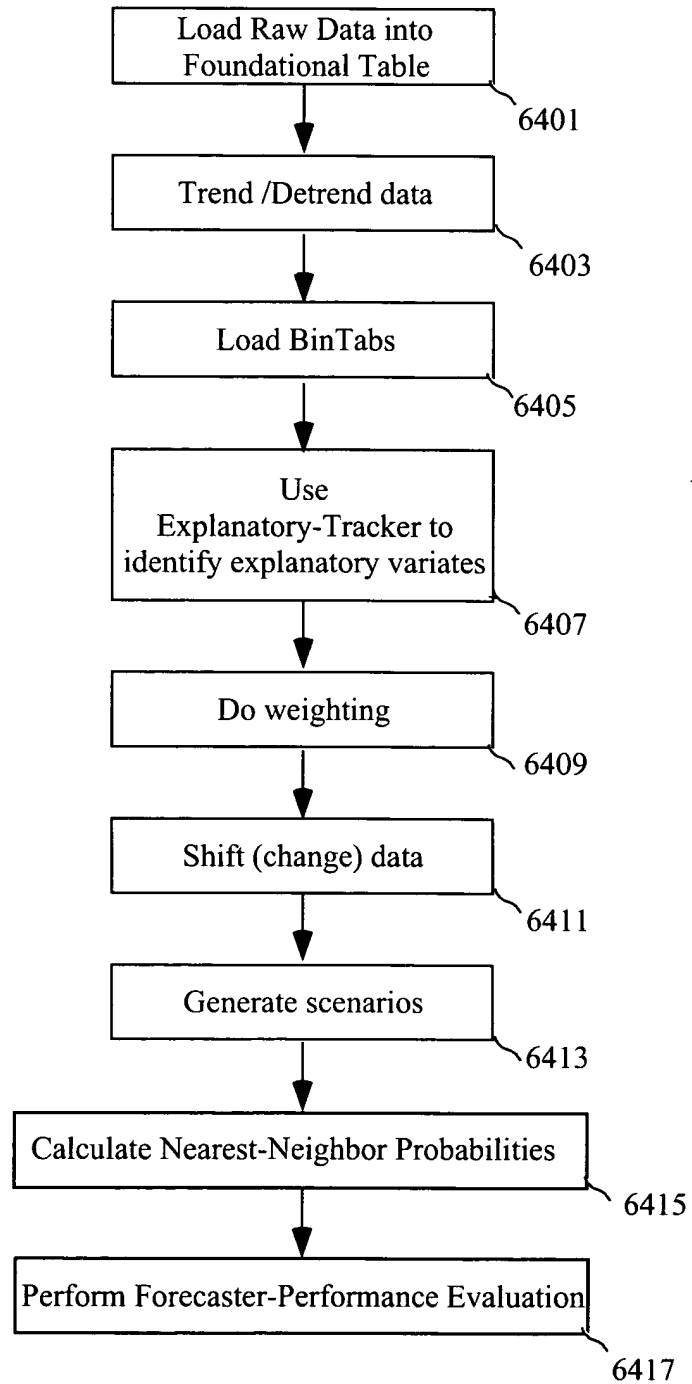


Fig. 65

DD-MM-YY	GDP	Oil Price	Oil Price - Pv 1	Oil Price - Pv 2	Oil Price - BPPv 1	Oil Price - BPPv 2	Oil Price - IPv 1	Oil Price - IPv 2
29-Mar-10	14.6	20.85						
30-Mar-10	14.6	20.88	20.85		-0.11		0.02	
31-Mar-10	14.6	20.82	20.88	20.85	0.27	0.16	-0.06	-0.03
1-Apr-10	15.6	20.96	20.82	20.88	-0.65	-0.38	0.13	0.08
2-Apr-10	15.6	20.52	20.96	20.82	2.08	1.45	-0.44	-0.30
5-Apr-10	15.6	20.55	20.52	20.96	-0.16	1.92	0.03	-0.40
6-Apr-10	15.6	20.60	20.55	20.52	-0.22	-0.38	0.04	0.08
7-Apr-10	15.6	20.62	20.60	20.55	-0.11	-0.33	0.02	0.07
8-Apr-10	15.6	20.52	20.62	20.60	0.48	0.37	-0.10	-0.08
9-Apr-10	15.6	20.53	20.52	20.62	-0.05	0.43	0.01	-0.09

Fig. 66

PatientId	Age	CancerHas	At5	At10	At15	At20	At25	At30	At35	At40
1000	5	0	0							
1000	10	1	0	1						
1000	15	0	0	1	0					
1000	20	0	0	1	0	0				
1000	25	0	0	1	0	0	0			
1000	30	0	0	1	0	0	0	0		
1000	35	1	0	1	0	0	0	0	1	
1000	40	1	0	1	0	0	0	0	1	1
8000	35	0							0	
8000	40	1							0	1

Fig. 67

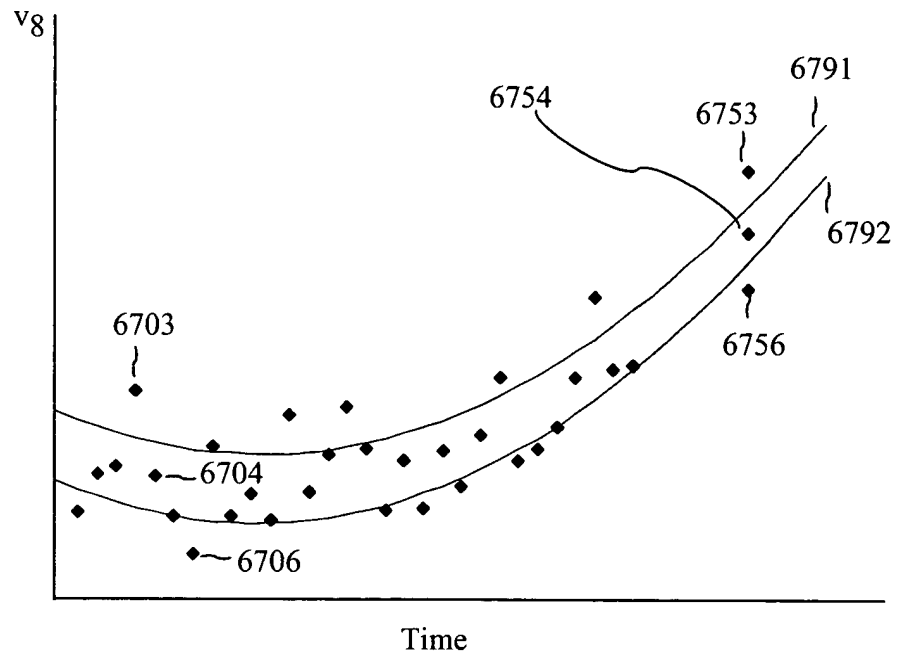


Fig. 68

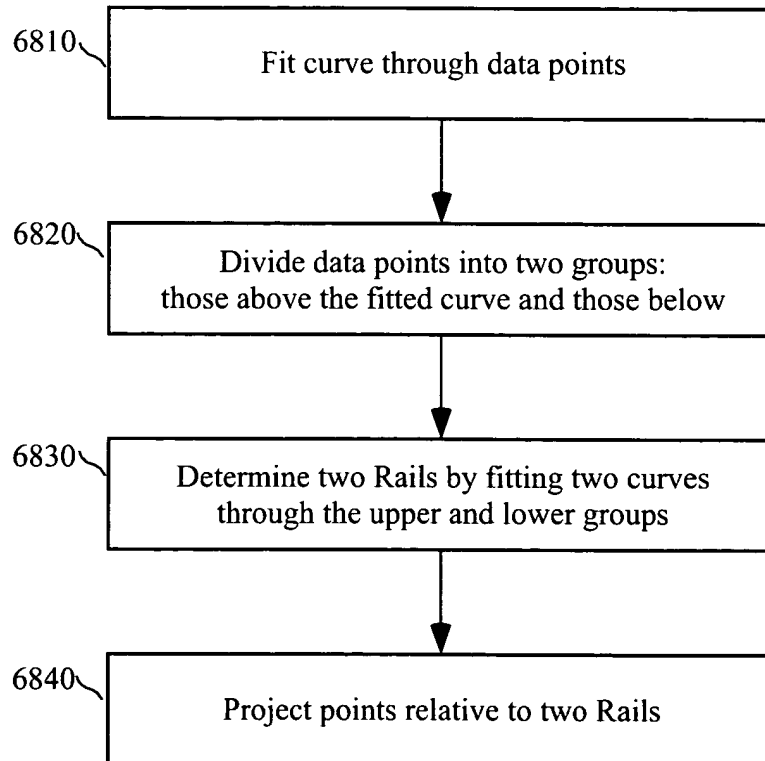


Fig. 69

Time	v8	Rail Low	Rail High	Gap	Over High	Between low and high	Under low	Projection into Time=35
3	415	138	304	166	67%			941
4	213	127	293	166		52%		791
6	30	111	277	166			49%	659
35		723	854	131				

Fig. 70

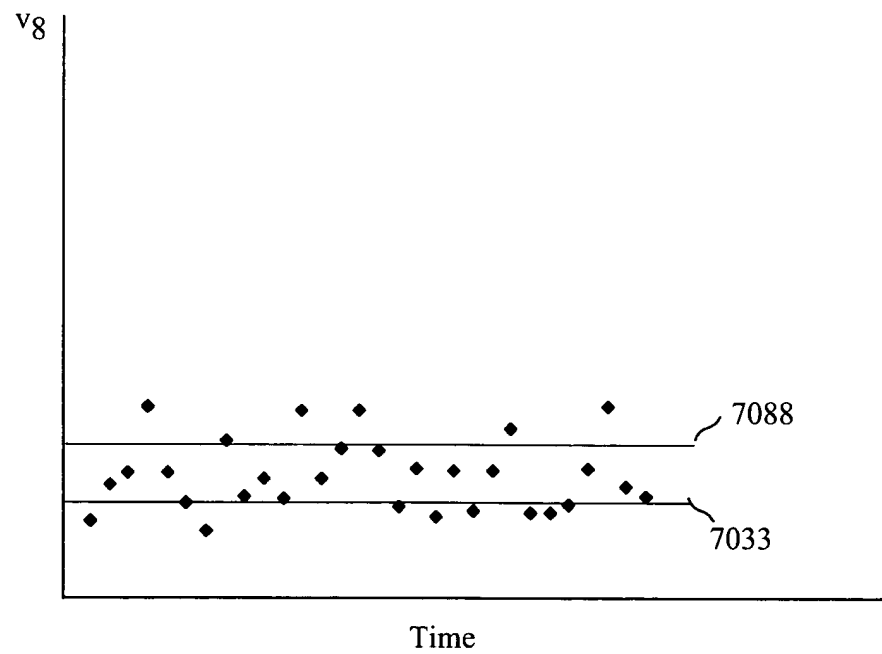


Fig. 71

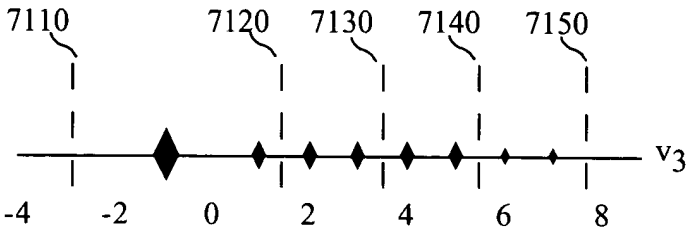


Fig. 72

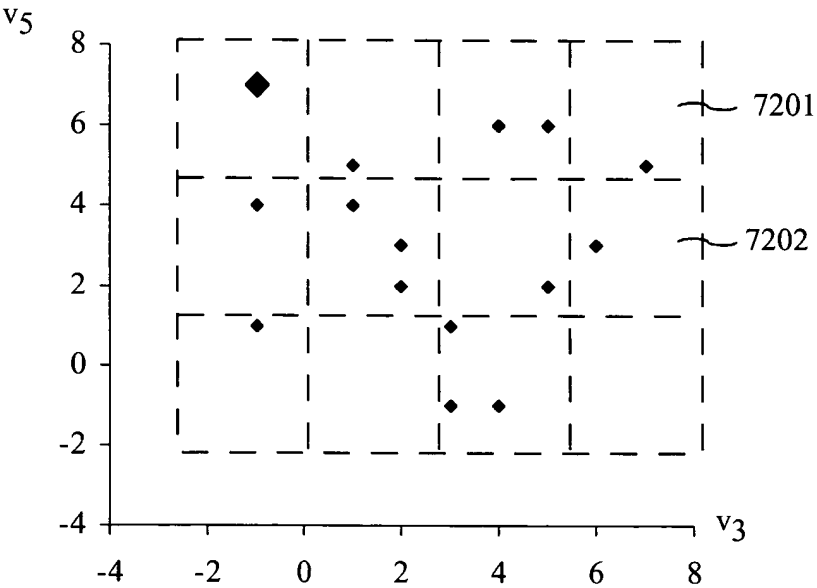


Fig. 73

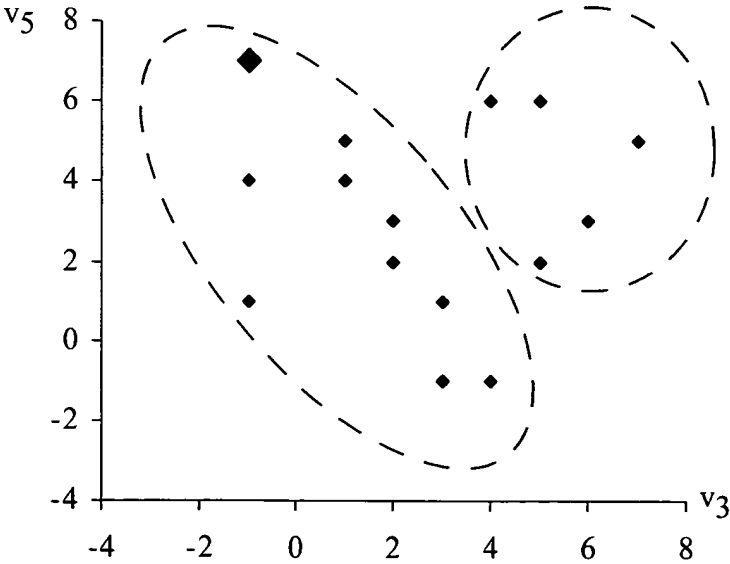


Fig. 74

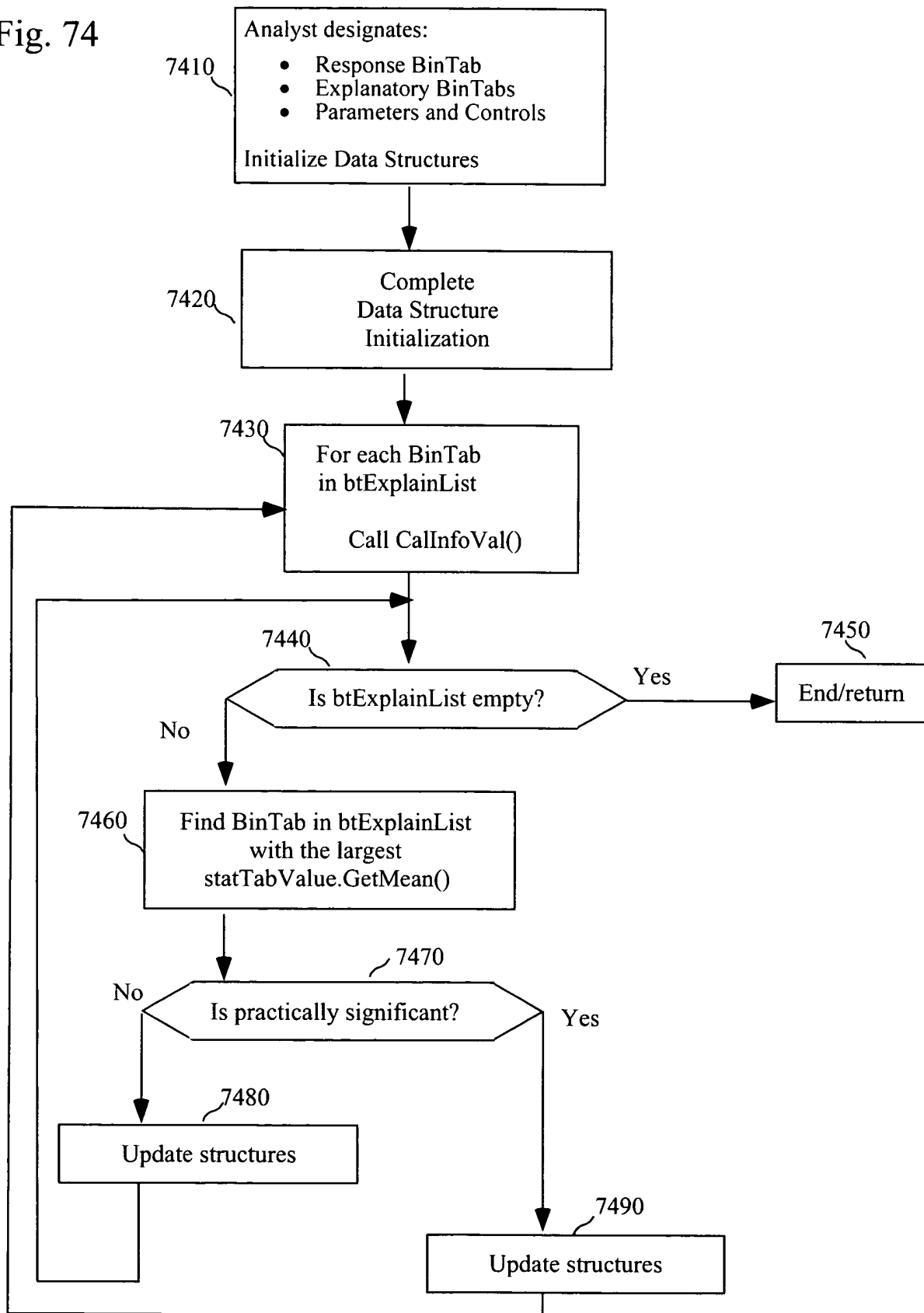


Fig. 75

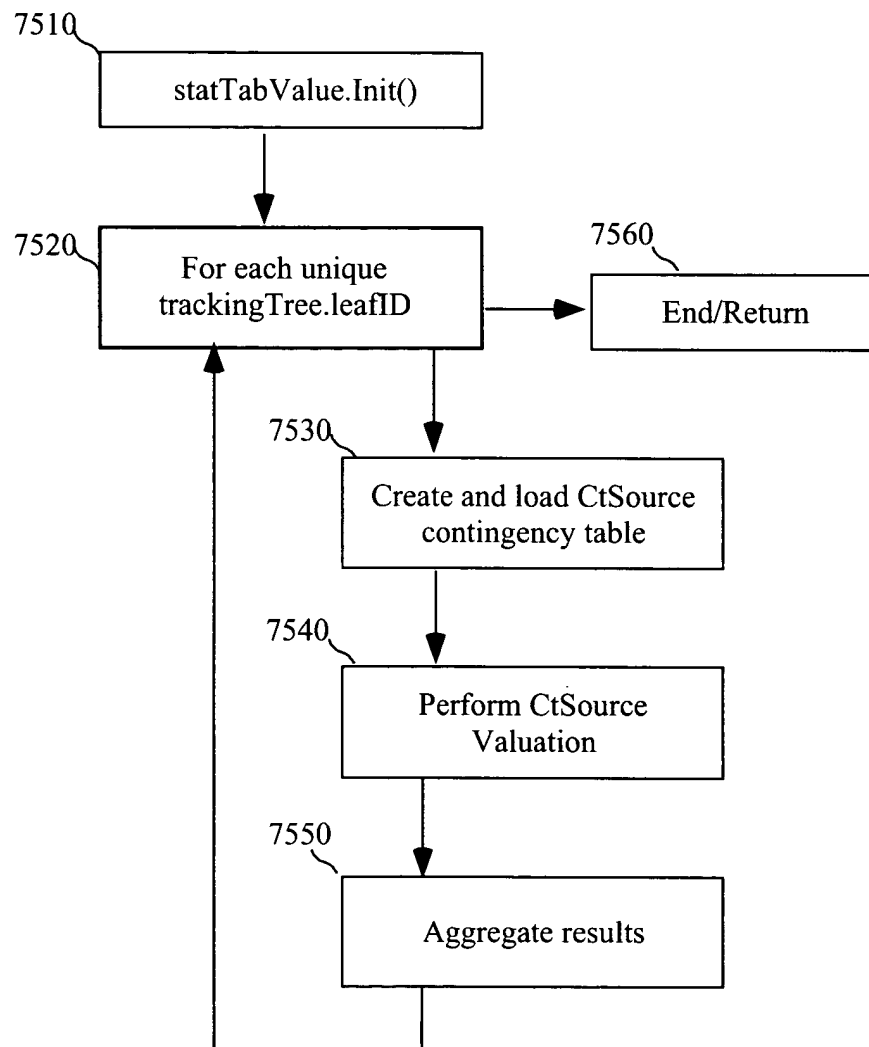


Fig. 76

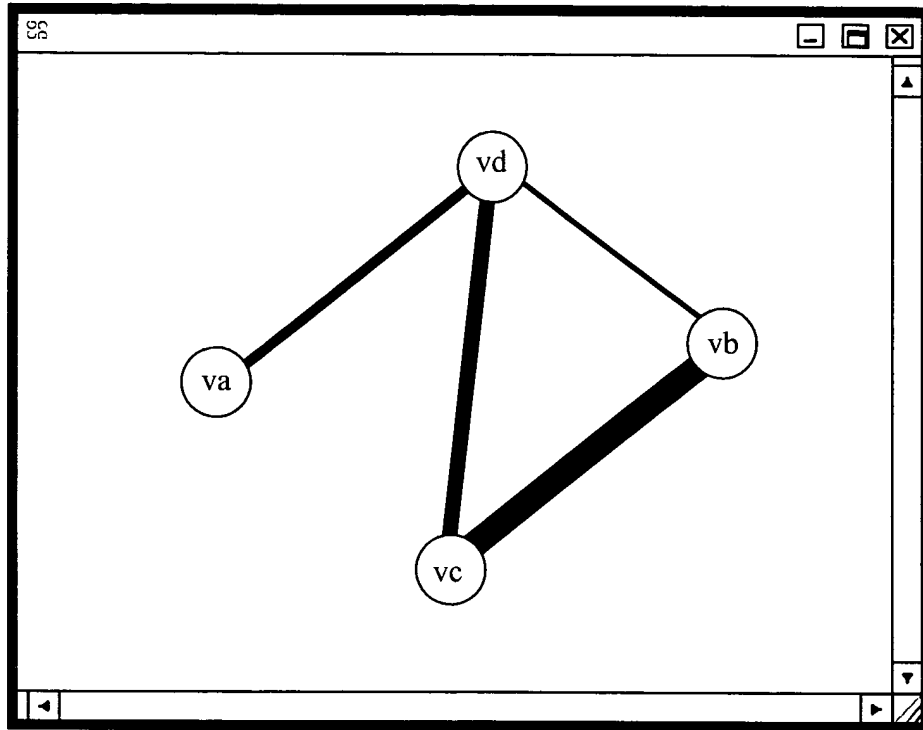


Fig. 77

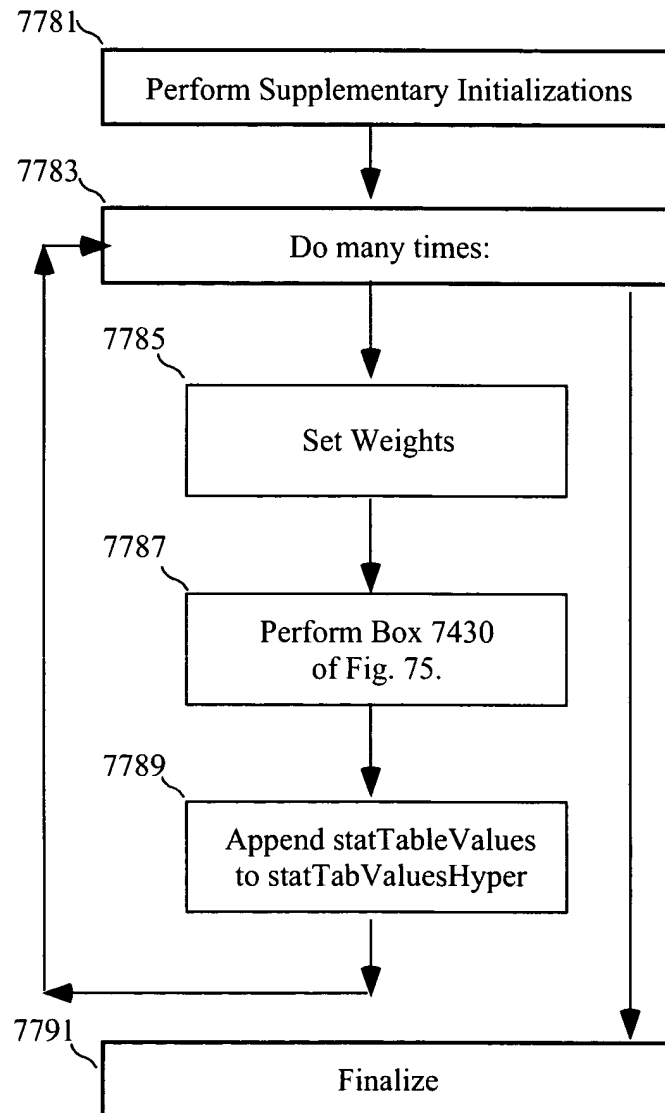


Fig. 78

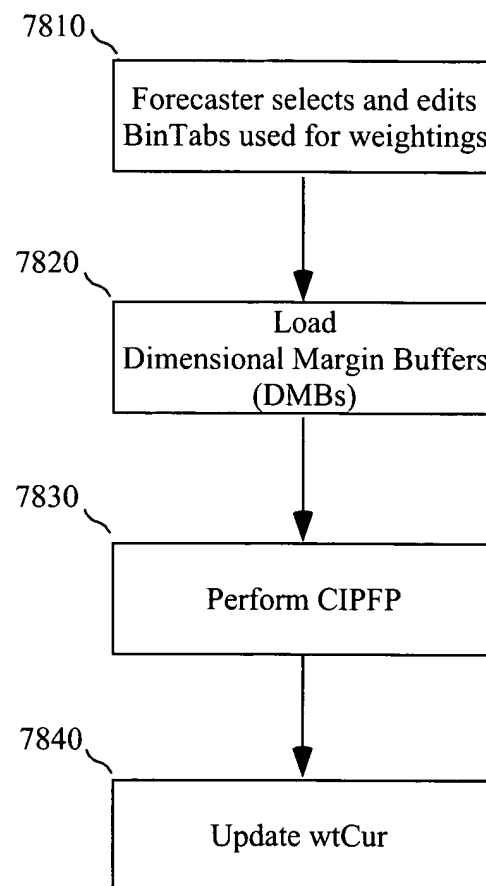


Fig. 79

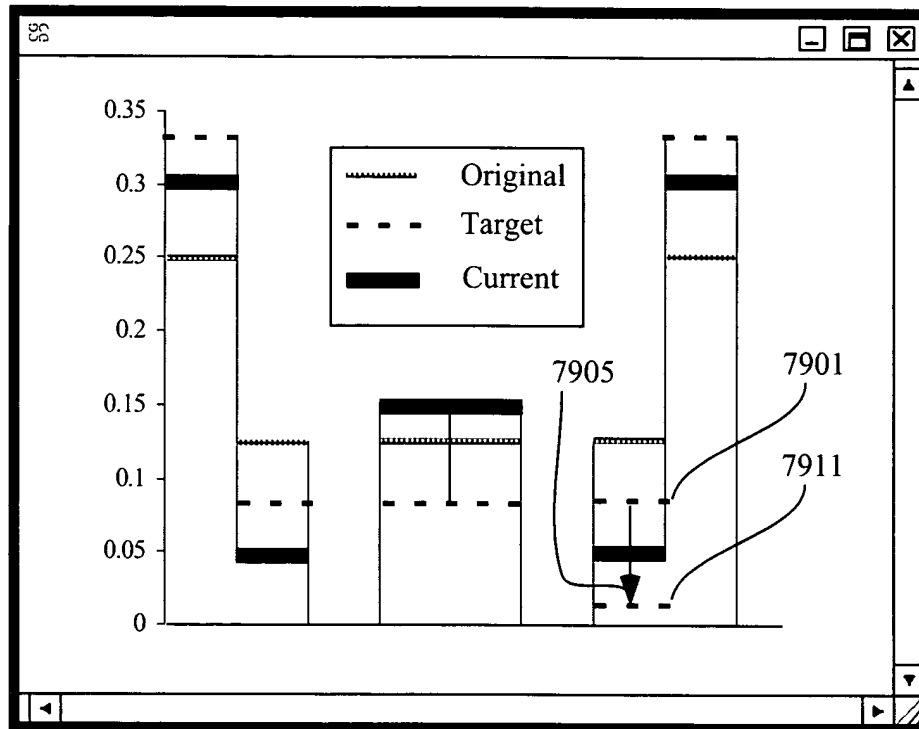


Fig. 80

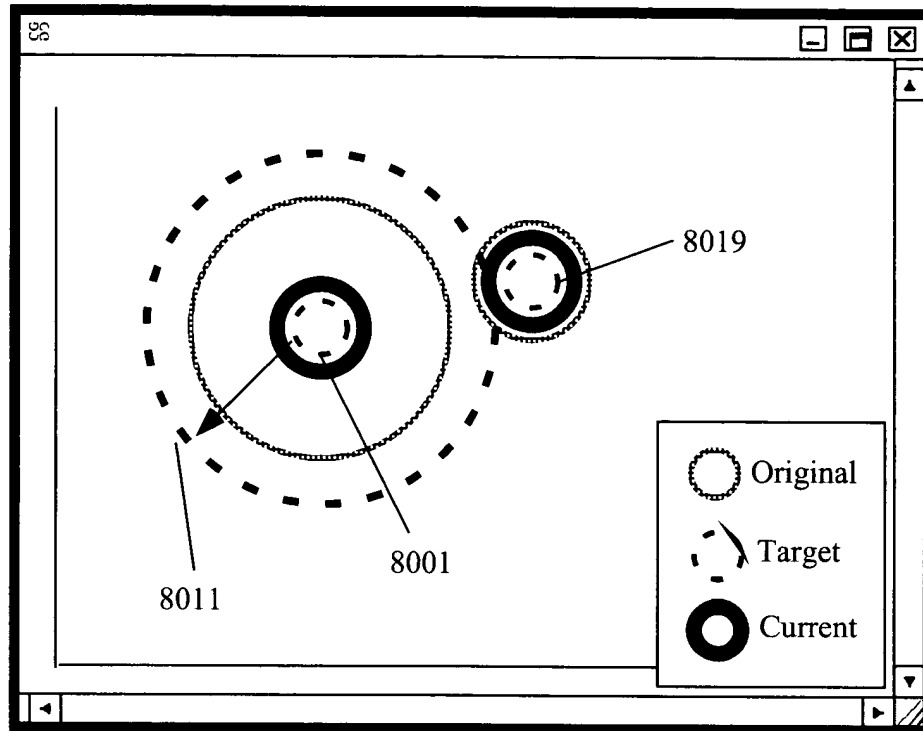


Fig. 81

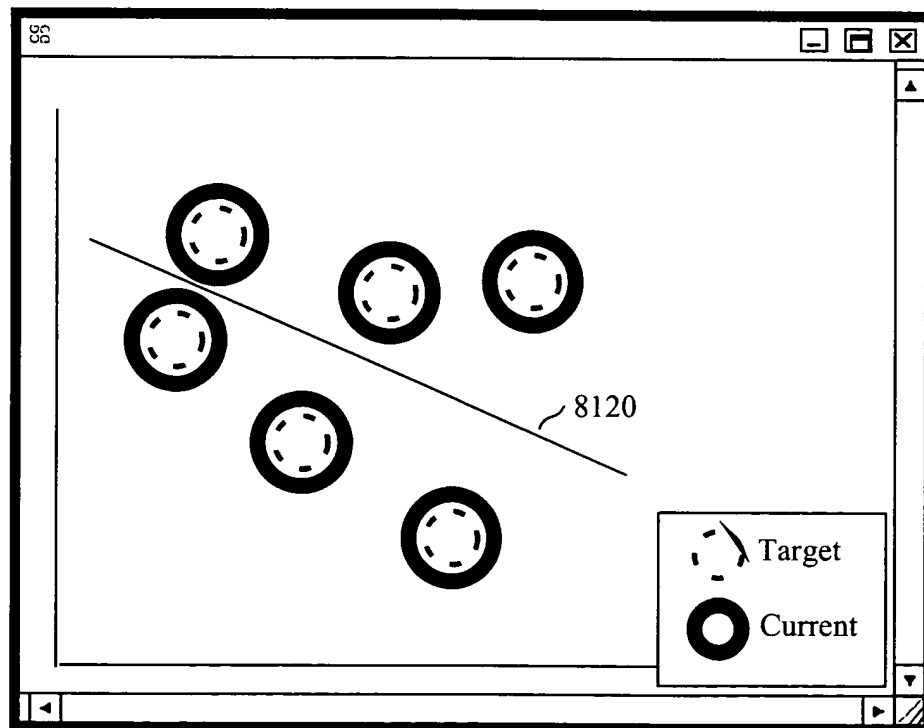


Fig. 82

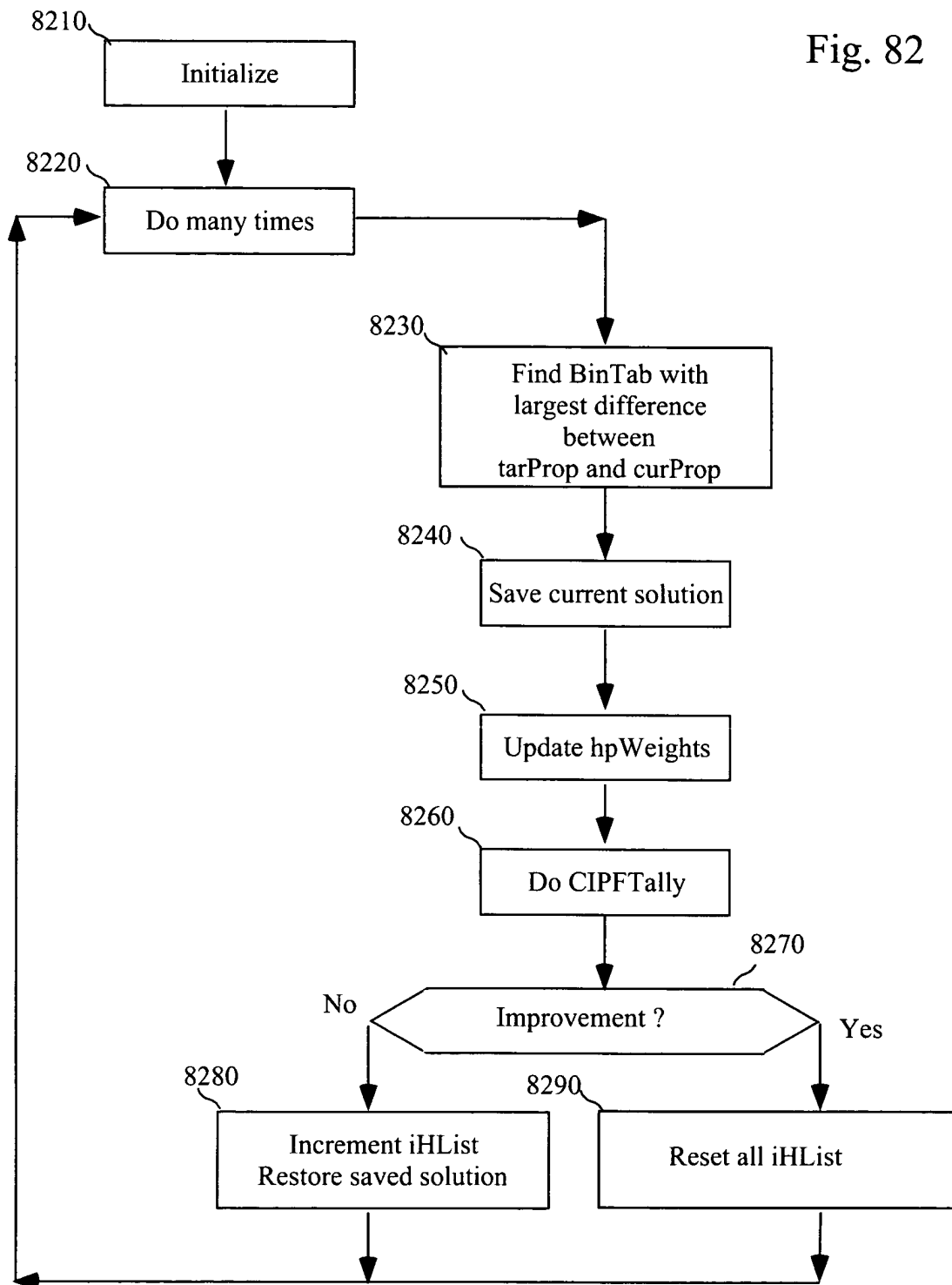


Fig. 83

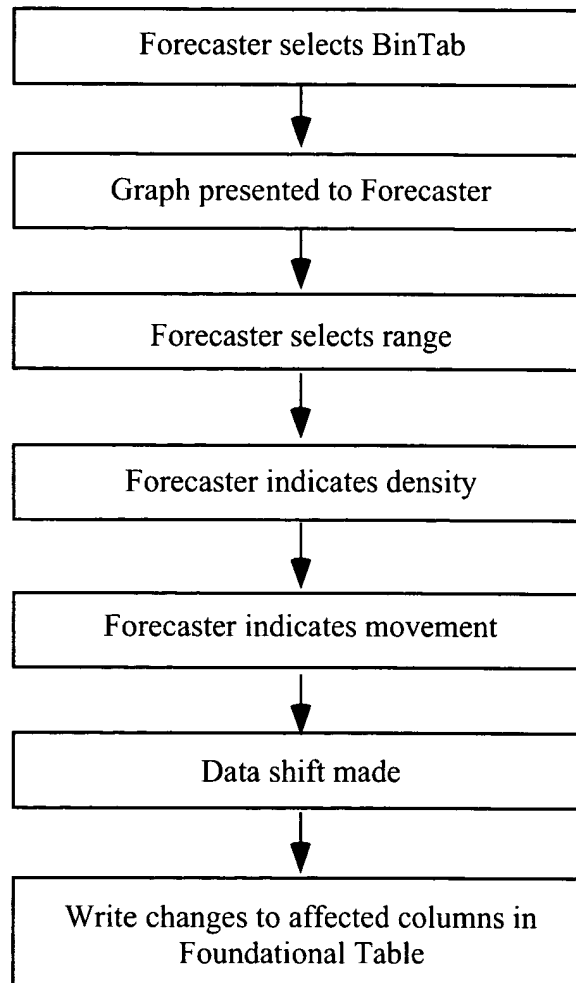


Fig. 84

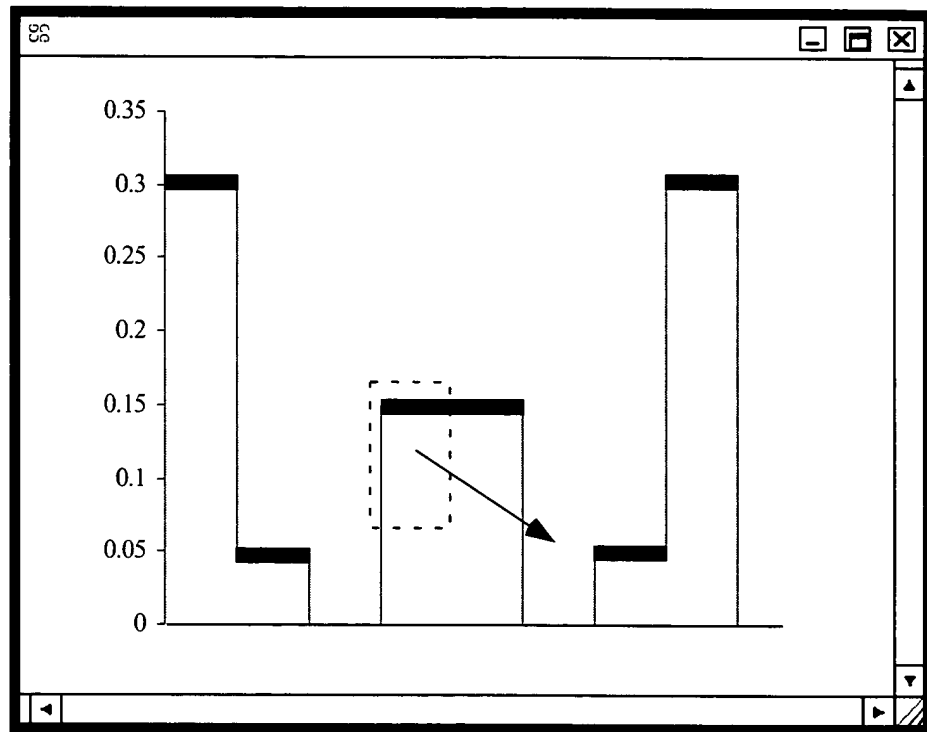


Fig. 85

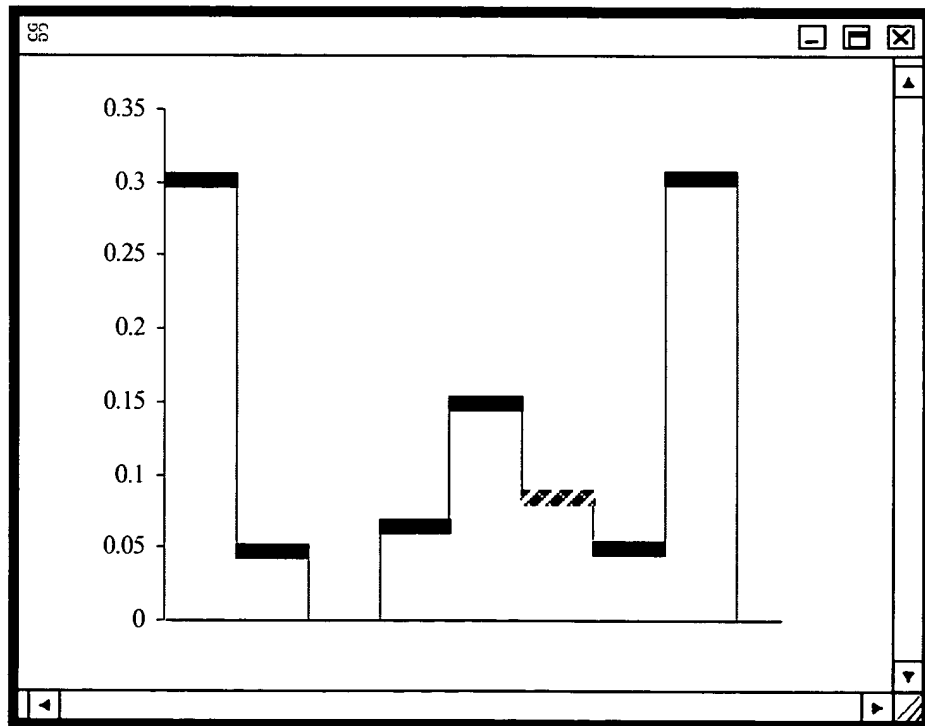


Fig. 86

A dialog box with a title bar containing a standard icon and a close button. The dialog contains three main sections: 'Source', 'Percentage Density', and 'Destination'. Each section has a 'Lo' and 'Hi' header above a two-row table. The 'Source' table has values -1.10 and 0.00. The 'Percentage Density' section has a single input field with the value 0.60. The 'Destination' table has values 1.02 and 2.04. At the bottom are 'OK' and 'Cancel' buttons.

Source		Percentage Density	Destination	
Lo	Hi		Lo	Hi
-1.10	0.00	0.60	1.02	2.04

OK Cancel

Fig. 87

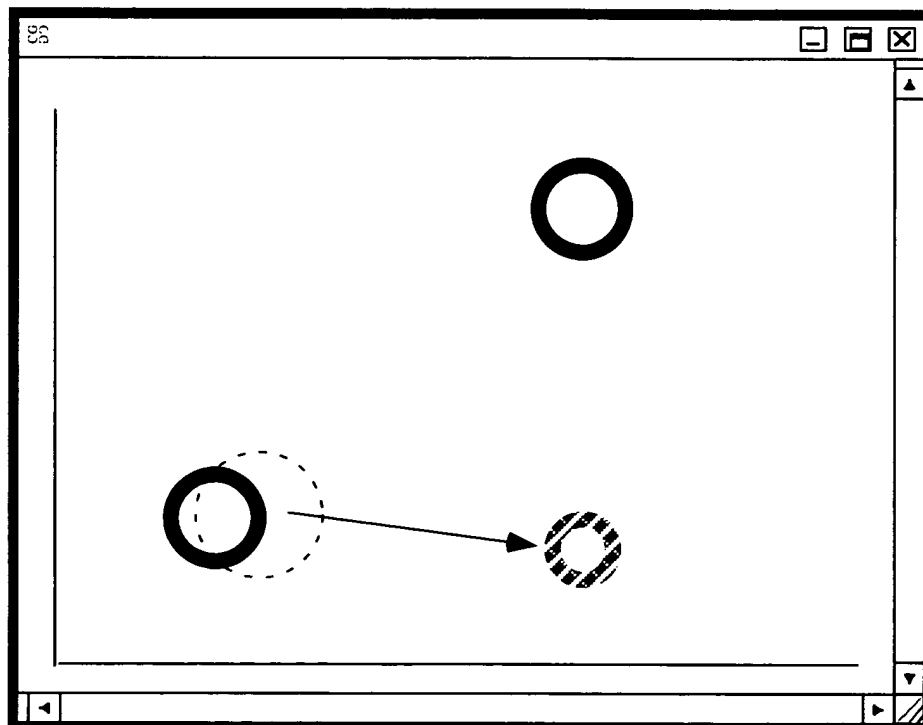


Fig. 88

		Foundational Table Type	
		Cross Sectional	Time Series
Scenario Form	Direct		
	Sampled		

Fig. 89

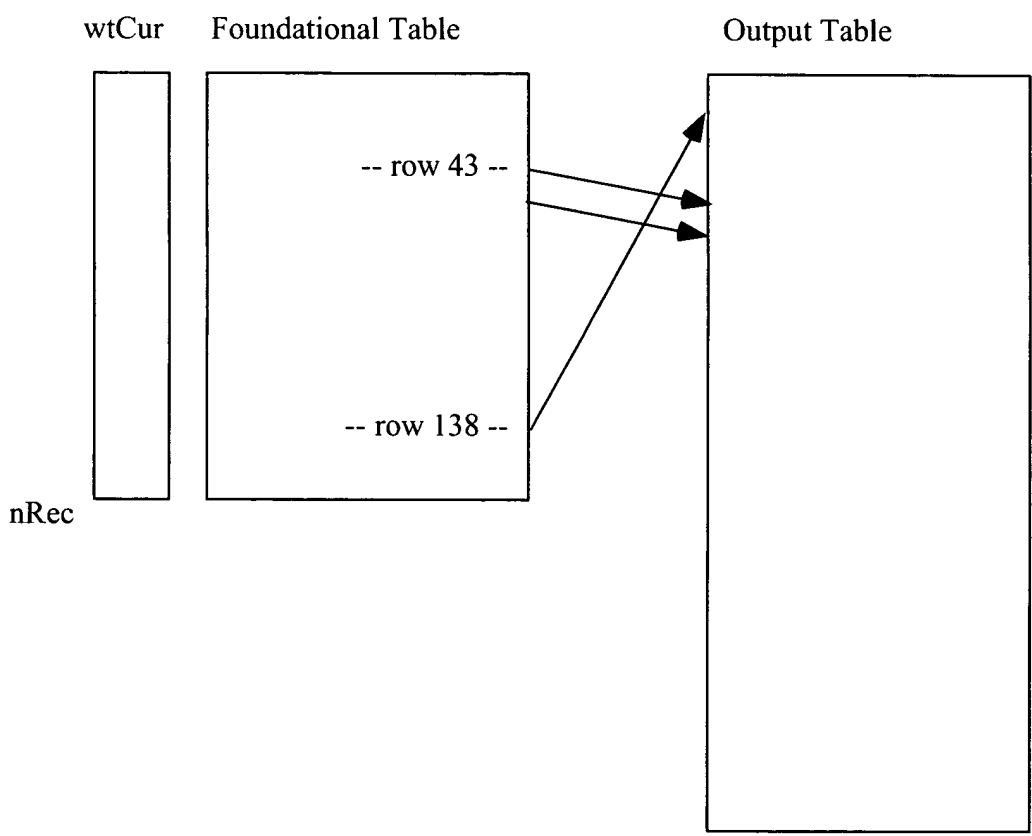


Fig. 90

DD-MM-YY	Oil Price	Upcoming Month's Unemployment
- - -		
29-Mar-10	20.85	4.2
30-Mar-10	20.88	4.2
31-Mar-10	20.82	4.2
1-Apr-10	20.96	4.1
2-Apr-10	20.52	4.1
5-Apr-10	20.55	4.1
6-Apr-10	20.60	4.1
7-Apr-10	20.62	4.1
8-Apr-10	20.52	4.1
9-Apr-10	20.53	4.1
- - -		
30-Apr-10	20.77	4.1
3-May-10	20.32	
- - -		
31-May-10	20.96	
1-Jun-10	20.52	
2-Jun-10	20.52	
3-Jun-10	20.53	

Fig. 91

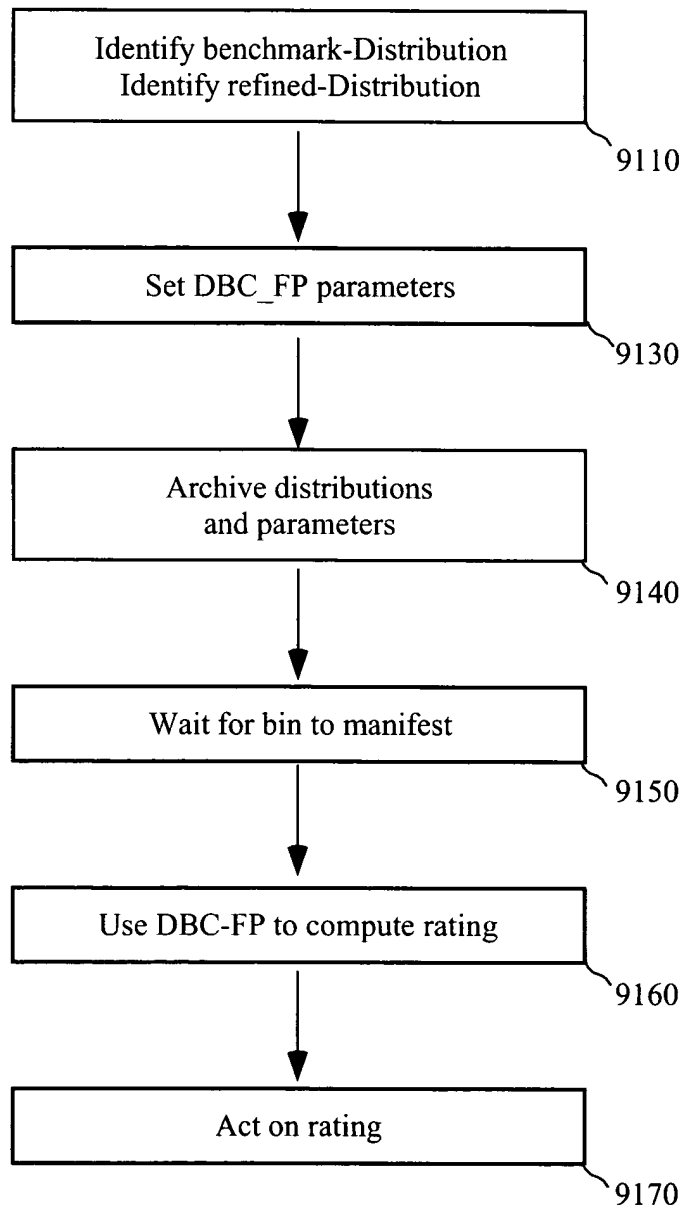


Fig. 92

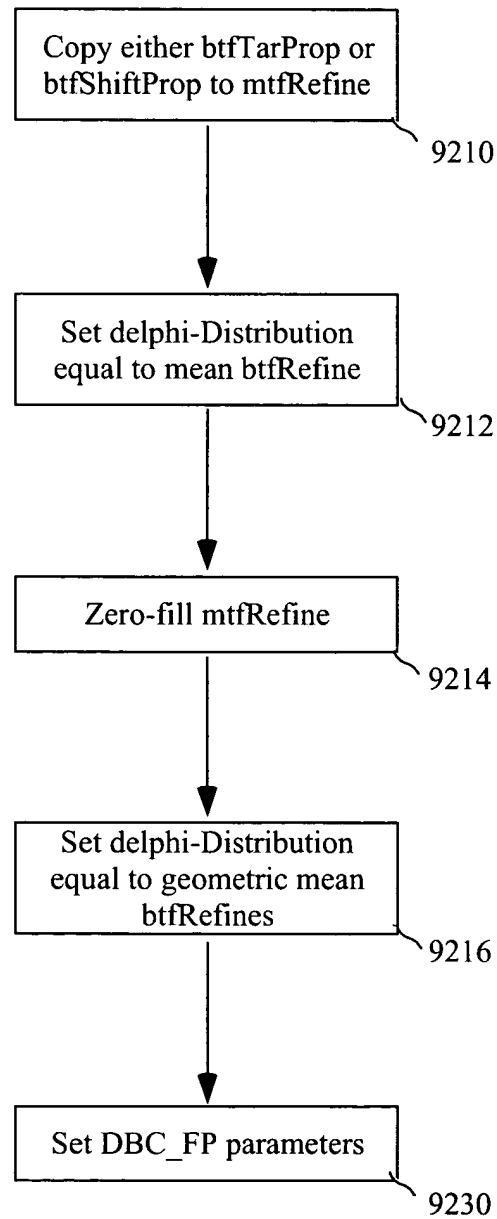


Fig. 93

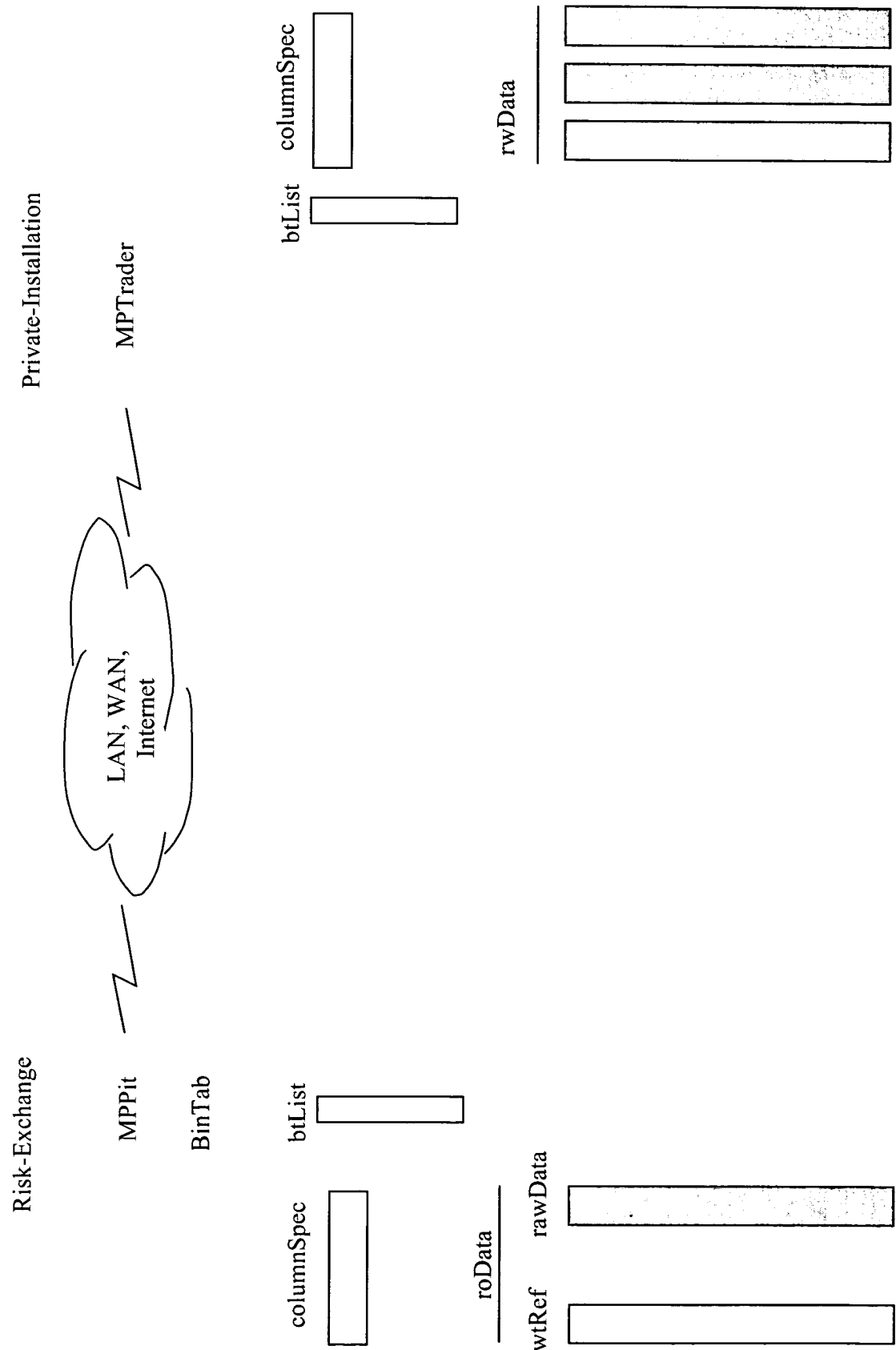


Fig. 94

```
class MPPit
{
  mppSpec
  pBinTab
  postPeriodLength
  nextClose
  finalClose

  Risk-Sharing Section
  arithMean-Distribution
  geoMean-Distribution
  Offer-Ask Table
  traderID  cQuant  AC-DistributionMatrix
  

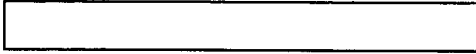
|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|




  Risk-Trading Section
  Stance Table
  Leg Table
  ValueDisparityMatrix
  hzlMeanValue
  vtlReturn
  vtlCost
  vtlYield

  InfoRefresh()
  PerformSharingTrading()
  PerformFinalSettlement()
}
```

Fig. 95

```
class MPTrader
{
    mptSpec
    pBTManager
    align-Distribution 

    binOperatingReturn 

    mpPitView

    RefreshAlign();
    RefreshBinReturn();
}
```

Fig. 96

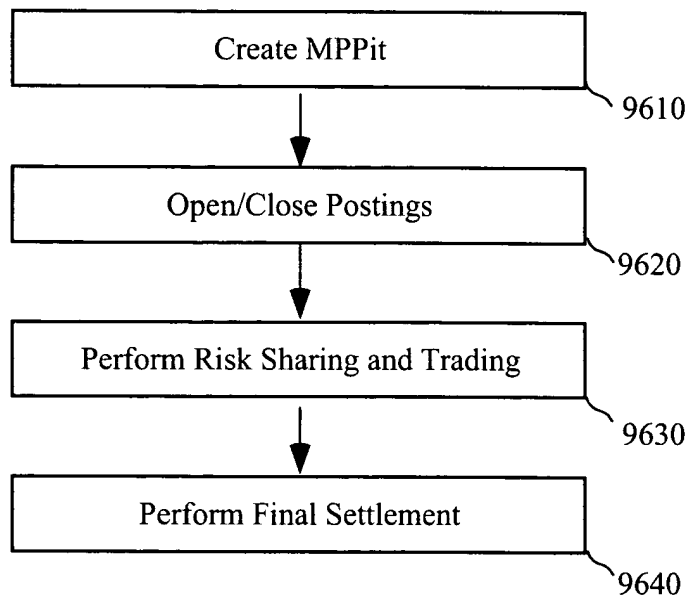


Fig. 97

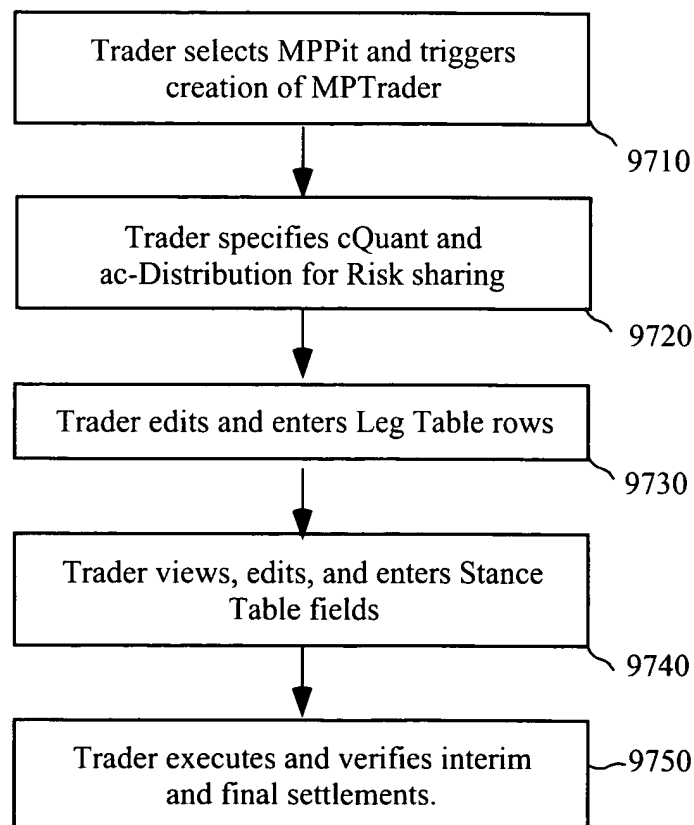
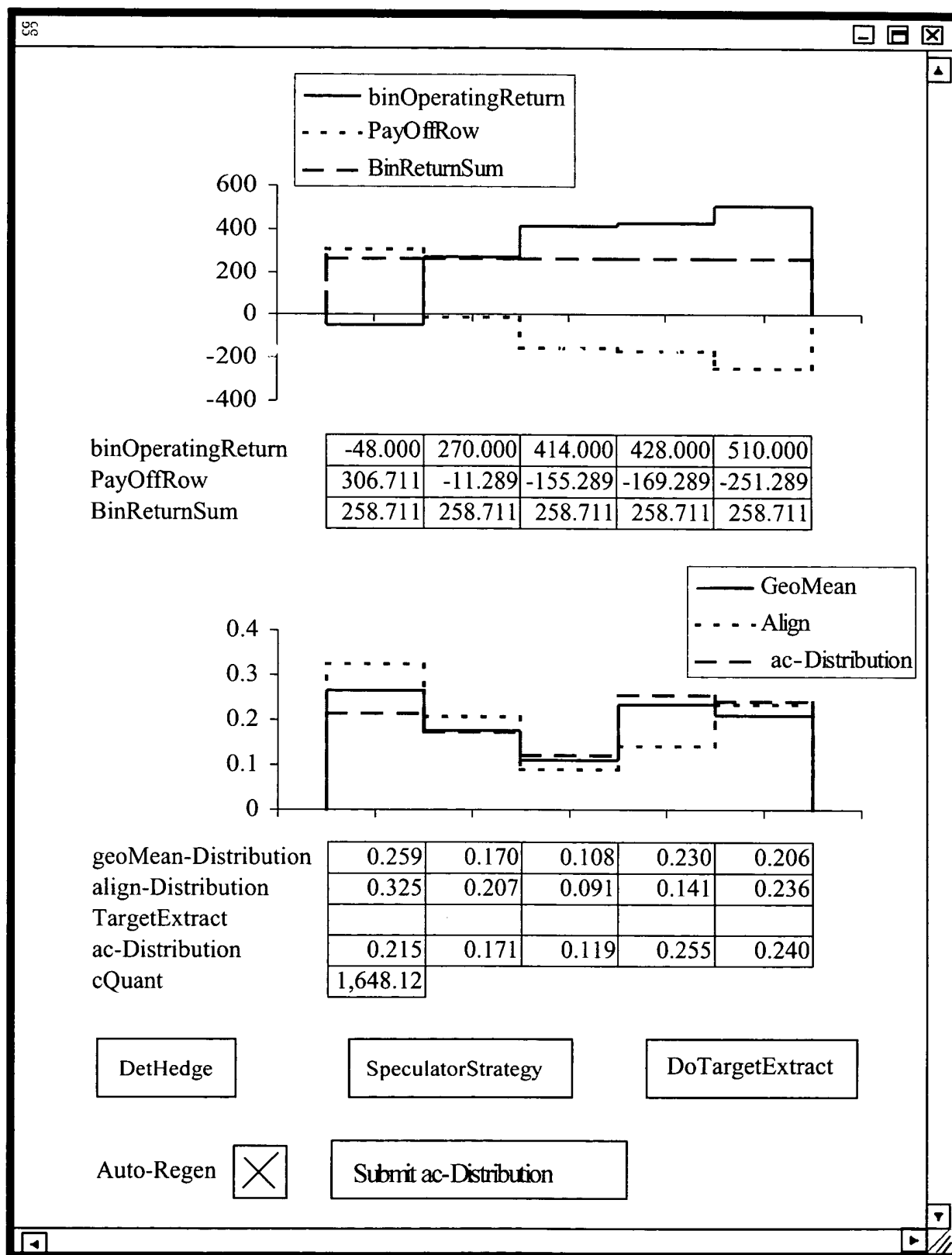


Fig. 98



	306.711	-11.289	-155.289	-169.289	-251.289
Retain	306.711	-11.289	-155.289	-169.289	-251.289
OkSell	-206.711	7.608	104.659	114.094	169.359
NetPosition	100.000	-3.681	-50.630	-55.195	-81.930

	OK Sell	Cash Ask	hzi Mean Value
306.711	No	0.000	.
-206.711	Yes	0.000	80.413
0.000	Yes	15.000	.
0.000	No	0.000	.
			.
			.
			.

Submit

Submit

Fig. 100

